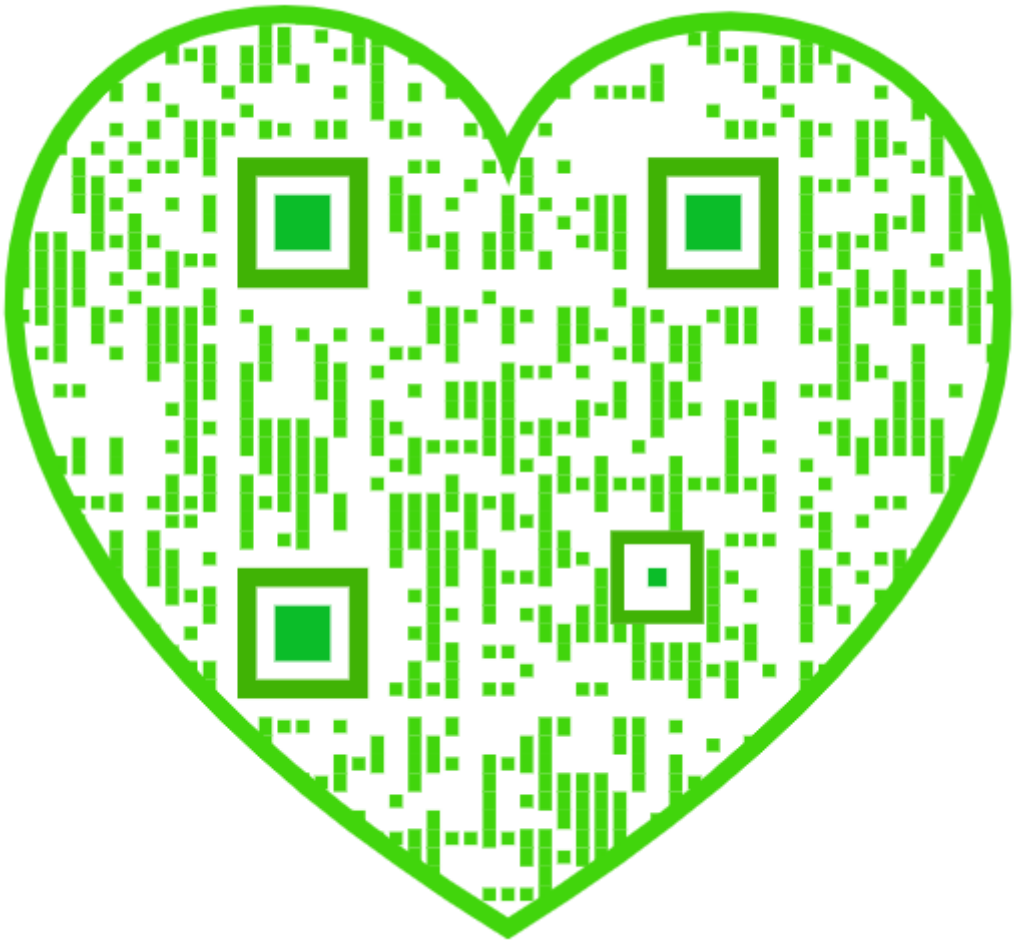

ENTERPRISE

AND THE

PRODUCTIVE PROCESS

A THEORY OF ECONOMIC PRODUCTIVITY PRESENTED FROM THE POINT OF VIEW OF THE ENTREPRENEUR AND BASED UPON DEFINITIONS, SECURED THROUGH DEDUCTION (AND PRESUMABLY, THEREFORE, PRECISE AND FINAL) OF THE SCOPE AND FUNDAMENTAL TERMS OF THE SCIENCE OF ECONOMICS

BY

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PREFACE

THE present age is markedly one of social and industrial evolution, differing from previous eras not only in the rapidity with which changes are effected and in their radical character and wide influences, but also in the fact that social and economic development is more and more consciously directed. In the ancient civilisations which have arisen, culminated, and declined, there was practically no attempt at intelligent guidance. Proximate and immediate benefits to individuals, classes, and communities were alone considered. And this is equally true of feudalism and the Middle Ages—the first stages of our present civilisation. Such progress as was slowly obtained was wholly due to the survival of the unconscious fittest. There was little or no intelligent and well directed effort to fit society in general to survive and progress. The intensity of class struggles necessarily precluded any vital conception of society as an harmonious whole

capable of higher and higher development under intelligent direction. This glorious possibility has indeed occurred to many isolated individuals, especially the advocates of Socialism and the great religious teachers, who have done something towards its accomplishment, but until very lately there has been no concerted action tending to the application of scientific principles to the social and industrial evolution of the nation and the race. The individualism which found its scientific expression in the dogma of "laissez faire," so very lately discarded, is indeed a practical denial of the possibility we are discussing—which can only arise from concerted action, that subordinates individual to social interests, and that can only be effected in two ways, namely through regulation by the State or by individuals generally abandoning such advantages as are disadvantageous to others.

But whether accomplished by disinterested benevolence or by the State, consciously directed evolution can only be intelligent when governed by principles scientifically established, and both individuals and society must depend upon Sociology and Economics for such principles. Unfortunately neither of these sciences is accepted as authoritative. Sociology is in a confessedly chaotic and undeveloped condition,

but is only incidentally under consideration in this treatise to the extent in which the principles involved in our discussion of Economics are adaptable to the definition of Sociology also and make plain the line of demarcation between the two sciences.

In Economics, however, a great deal has been accomplished and a very considerable body of doctrine exists, which because there is no serious dissent should perhaps be regarded as authoritative. The trouble is that it is so regarded only by a limited circle of specialists. Another considerable body of doctrine regarded as authoritative by most of the competent, is yet disputed by some. Still another body of doctrine, especially attractive to logicians and specialists because of the brilliant ratiocination of its exposition, is really scholastic—founded, that is, on assumed premises, subjectively true perhaps but of no assured objective value.

It is, however, hardly an exaggeration to say that there is no considerable body of economic doctrine accepted as authoritative by the generally educated, and the "man in the street" is altogether a scoffer. Why is this? Publishers tell us that the interest in orthodox economic works has greatly declined and yet there never was a time when sounder treatises were being issued or when the public attention was so

absorbed in the solution of practical economic and social problems. On the other hand, any writer is sure of a good audience who treats these subjects sympathetically, however crass his ignorance, poor his judgment, or Utopian his schemes—especially if he has some gift of literary expression. It is indeed true that the public is rightly influenced in its decisions by sympathy as well as by reason, and that practical economic and social matters are especially close to our hearts. But the cruelty and selfishness of allowing ourselves to be guided by unintelligent sympathy is now so well recognised that the distrust of economic theory—our natural instructor—is difficult to understand.

Can it be that economic theory is tainted with scholasticism at its very source and that the public in its dim but sure way has detected this? Possibly some will say it is not this but the complicated character of economic phenomena, the abstractness of its principles, the difficulty of the subject itself that has raised economic dogma above the comprehension of all but specialists. But are not these circumstances the very earmark of scholastic disquisition? When is any theory hard to understand and instinctively felt to be dubious? Is it not just when one or more of its underlying premises are not accurately comprehended?

What are the underlying premises of Economics? Surely they are the scope of the science itself—the four productive factors, the function peculiar to each of them, and the nature of the reward attributable to the exercise of each function. But these are exactly the things that orthodox economists have not succeeded in settling among themselves. Each thinker has of course more or less precise and distinct conceptions in his own mind, but these conceptions do not agree with those of other economists, and there is no hope of their agreeing until some way is found of arriving at definitions of these fundamental terms which any one who understands them is under a logical necessity of accepting. This accomplished, a foundation for public confidence will at least be laid and practical applications made possible which should prove especially valuable during the period of critical economic changes through which we are passing.

Despite the popular accusation against Economics that it is not an inductive science, the course of investigation largely and the development of theory almost wholly have been from the particular to the general. The fundamental truths have been looked upon as the final goal of investigation, and it is due to this that they have not been accurately defined. It has ap-

peared to the writer that though a vast amount of probably true theory can be and has been so developed, we can never be quite sure of any deduced results, and that therefore Economics will remain somewhat scholastic and lacking in authority, and more or less inapplicable to the solution of our practical economic difficulties, until the fundamental conceptions of the science are authoritatively settled. This is just what the author has attempted to further in this treatise. Of course his first appeal is to the specialists, and he must be judged by them. But if it turns out that he is correct, it is the educated who are not specialists and even more the "man in the street" whom he particularly desires to reach, because it is through them that any practical influence the book may have must be exerted. Fortunately for his purpose the author has been able to formulate a novel conception of the productive process which is at least clear cut, consistent, and untechnical, and which should therefore be readily comprehensible by the reader of average culture. And what is more important he ventures to hope and believe that this conception has been arrived at by a method which will command the assent of all those to whom he shall succeed in making his meaning clear.

He is however unhappily conscious that in

the development of his argument he is forced to make somewhat heavy demands upon the reader, due partly to the novelty and difficulty of the subject and partly to his own shortcomings in presenting it. This treatise is an attempt at the resolution of three distinct problems, which are yet so intimately connected and so mutually dependent that they cannot well be presented separately. He has been forced, therefore, into treating them in the main conjointly, though of course they have been separated so far as was possible, in which respect an abler disputant would doubtless have succeeded better. As a consequence of this manner of presentation, the author, in treating each problem, has been forced to anticipate largely what he has to say of the others, and has been obliged to indulge in repetitions and re-statements that would have been unnecessary if he had been able to present each problem by itself and develop his train of argument more consecutively. Hardly any reader, especially any perfunctory reader, passing upon, and deciding upon in his own mind, each separate proposition as he comes to it, will be able to grasp the author's concept of the productive process as a whole. He feels, therefore, that he has a right to ask the reader to reserve his judgment, and not to pass upon him

piecemeal, until he has familiarised himself with the whole scope of the argument.

This request is the more essential because some of the separate claims and statements standing alone and unsupported will appear to conflict with propositions usually regarded as settled, and the reader who refuses to reserve his judgment about them will not be as open to conviction when the completed justification of them is finally stated.

Moreover, this treatise is substantially a criticism of the most fundamental ideas and definitions in the Science of Economics, and it is but natural to human nature to distrust and antagonise any one disturbing settled usages and opinions, especially when such usages and opinions have served as the premises upon which a great part of the thought and work of our lives has been based. The author can honestly say, however, that he has not written in the spirit of an advocate desirous of establishing some fad or fancy or preconceived idea, but solely in the hope of making, through investigation in an untrodden field, an addition to the sum of scientific truth, and without any regard for the corollaries deducible therefrom, except to the extent in which they illustrate and enforce the truth itself. And he is confident that this will be appreciated, and his

Theory of the Productive Process be given fair and unbiassed judgment, despite any natural predisposition against some of its conclusions that may be aroused. These conclusions, such as they are, have been reached by a more rigid application than is common of the well recognised principles that have governed past economic discussion—or, at least, that has been the constant aim of the author—and he is confident that his effort will be recognised as only a conscientious attempt to carry economic analysis a little farther along the line of its natural evolution.

As to the practical bearing of the matters discussed in this treatise, it should be sufficient to point to the fact that every proposal of socialism, of municipal ownership, of State regulation of industry, of the policy of protection, in short all proposed legislation affecting production, is necessarily a proposal to restrain, modify, or regulate the actions and relations of the economic factors of production. It is surely self-evident that interference with the course of industry will be intelligent and beneficial in the exact degree of our understanding of the forces to be regulated. But it is exactly about the character and relations of these forces that no "consensus of the competent" has been reached. If, therefore, this

treatise accomplishes anything towards obtaining such a consensus, and its Theory of the Productive Process is established, an understanding of the involved conceptions of the productive functions is an absolute necessity to any constructive statesman who wishes his work to endure.

In various articles contributed by me to the *Quarterly Journal of Economics* (Harvard) some few of the ideas here advanced have appeared, but, necessarily from lack of space, disconnected from their connotations and without logical sequence, so that this presentation of my Theory of the Productive Process is practically my first appeal to the judgment of fellow-students.

FREDERICK BARNARD HAWLEY.

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ENTERPRISE AND THE PRODUCTIVE PROCESS

ENTERPRISE AND THE PRODUCTIVE PROCESS

CHAPTER I

PRESENT THEORETICAL POSITIONS

WHEN Adam Smith revolutionised the Science of Economics, he halted in his analysis at two very important points which, as every specialist will admit, his successors have not yet succeeded in fully resolving. These two yet dubious matters are the precise function of the entrepreneur, and the exact scope of the science itself. And it is in the hope of contributing something to the resolution of these two problems, and to the establishment of a method of testing economic definitions that affords, when applicable, a means by which the proper content of economic terms can be more authoritatively and definitely settled, that this treatise is written. The writer believes that

the discussion will develop a logical connection between these three problems much closer than would naturally be suspected, and that their relations are really so intimate as to preclude the separate resolution of either of them. The results of a further solution of problems so fundamental cannot of course be expected to agree with accepted dogma in every particular, but the author's purpose is not at all to attack established conclusions, except as it becomes incidentally necessary to his attempt to carry economic analysis beyond the points it has at present reached in these three directions.

It will surely be difficult to find an economist who would claim that he possesses a standard, conformity to which can be demanded in economic definitions and in the use of economic terms; or that the function of the entrepreneur and the nature of profit are thoroughly understood; or that he is aware of any fully satisfactory definition of the science itself. It will therefore readily be admitted that the writer's present attempt is in a permissible direction, and if the result proves inadequate he may yet have the satisfaction of calling attention to a field for investigation that demands research.

As this work is not to be controversial, it will hardly be deemed necessary for me to enter

into an elaborate investigation of what others have advanced in relation to our three problems. A concise statement, mainly for the convenience of the general reader, can be made of the present view of these matters, sufficient for the purposes of the argument, and from which, I think, there will be no serious dissent.

First, as to definition and use of terms. Economists sometimes verbally and sometimes silently, but almost universally, claim the privilege of such usages and definitions as they consider best suited for expounding their own particular views of any subject under discussion, provided they are consistent as to content; and examples are not wanting of writers deliberately using a given term in one sense for the discussion of one subject, and with a different content in the treatment of other subjects. This is perfectly justifiable whenever the content of any given term has not been authoritatively settled, but the custom necessarily entails a great deal of misunderstanding and confusion of thought. Controversial disagreement is very largely due to slight differences in content in the use of the same term by two disputants, and it is a common thing for one of them to charge his opponent with having unconsciously changed the content of some of his terms. Manifestly so long as the

possibility exists of changing the content of a term or of persons differing as to their understanding of the content—so long that is as we are not absolutely sure of our terms—positive and established results cannot be obtained. Even when an expositor has expressed his idea as to content so unequivocally that he cannot be misunderstood, a reader in whose mind a different concept has been firmly imbedded finds it difficult to follow the argument and indeed is pretty sure to misapprehend it. And the slighter the difference in concept, the more difficult is its detection and the more certain are misconceptions to arise.

This is forcibly illustrated in the controversy at present being carried on between two very distinguished and able economists, Professor John B. Clark and Professor Böhn-Bawerk of Germany, over the capital concept. The idea of the latter, which is also the idea generally held before Professor Clark proposed his amendment, is that capital is composed of the actual aggregate of "capital goods," created as they are produced and destroyed as they are consumed. The former regards it as a fund which, like a river, preserves its identity despite the flow of appearing and disappearing commodities. According to the principle of this treatise neither concept is correct, though Professor Clark's view

is a decided advance in the right direction. He is correct as to capital being a fund instead of an aggregate, but wrong, if I understand him correctly, as to the composition of the fund, which is not a flow of "capital goods" or commodities. The correct conception of capital is that it is a fund of unexpended purchasing power, or, in other words, an aggregate of unexerted claims on commodities in general and not an aggregate of specific claims on specified things. As the total power to purchase can be no greater or less than the total of purchasable things, the aggregate of capital varies, to be sure exactly with the aggregate of investments, but that is far from identifying a claim and the thing claimed—the farm and the mortgage upon it. How far astray the ablest logicians can be led by an inadequate conception is forcibly illustrated by this very controversy. Professor Böhn-Bawerk has written a work on *Capital and Interest* (justly regarded as among the ablest and most learned of recent publications), the whole argument of which is directed to prove that interest arises, not from abstinence or from the productivity of capital, but from the "ripening" of capital in the sense of "an aggregate of capital goods," oblivious of the fact that "capital goods" do not "ripen" at all in the hands of the capitalist as such, who is the re-

ceiver of interest, but do "ripen" in the hands of the entrepreneur, who, as such, is necessarily the only possible owner of "capital goods" and to whom interest is a cost. Or, in other words, the "ripening of capital goods" yields profit or loss, but never interest. It is indeed somewhat curious that no one seems to have been struck with the inherent absurdity of the idea that capital is what it is invested in, and that two bulky volumes, really wonderful in their acuteness and the lucidity of their logical deductions, should have been written to develop an argument founded on a misconception so gross as to amount to a contradiction in terms. Surely the necessity of authoritatively determining fundamental terms before employing them as premises could not be more forcibly illustrated.

I do not mean of course to assert that economists generally convert this privilege into license by greatly perverting commonly accepted meanings, or by persisting in the use of terms with especially incongruous contents. On the contrary, looseness of expression is always involuntary and tends to amendment when pointed out. Consequently there has been a constant progress from worse to better in a growing consensus in usage and definition among recognised authorities. But finality can hardly be attained by this method, for we have no means by which

we can be assured that we have progressed from better to best, and it is only the best that can demand universal concurrence or be safely used as a basis for deduction. Theoretically, of course, this is possible, for the process employed is simply the usual one of verifying inductions, and any induction can be considered as fully verified when found to be in exact agreement with all the facts involved. Unfortunately, to assure ourselves of this agreement is usually a practical impossibility when dealing with such a heterogeneous mass as economic phenomena. That no consensus as to the exact content of fundamental economic terms exists is only too evident in economic controversy, so large a part of which is taken up with attempts to settle them by means of observation and induction. Probably there are very few economic usages or definitions for which any one would care to claim an absolute infallibility—that is the precise accuracy which commands acceptance as a logical necessity. The writer, later in this work, will point out another method of arriving at the proper content of economic terms, which he hopes will be accepted as affording this logical necessity for at least some of the fundamental conceptions of the science. All that concerns us at this point of our argument is to emphasise the undisputed fact that the exact

content of none of them has been definitely settled and accepted.

Second, as to the scope and definition of Economics. There is no necessity of giving a list of the definitions proposed by a number of the more prominent economists who have formally, or by implication in the names given their treatises, attempted the problem.

The criticising of each of these multitudinous definitions in detail, for the purpose of detecting deficiencies, and thus arriving at a true result by the process of elimination, would be a mere continuation of the process by which they were originally obtained, and while it might discredit some present conceptions could hardly arrive at any authoritative result. It will suffice our present purpose if we are able to detect the purpose common to them all. This common conception appears to the writer to be this: that the science of Economics is concerned with only a part of the means and methods by which certain kinds of human well-being or "weal" are acquired, to the exclusion of certain other means and methods and of certain other kinds of weal. And it is in drawing the line between the included and the excluded human activities that these definitions diverge. Now it is more than probable that an authoritative definition of the Science, when

one is obtained, will afford the exact line of demarcation somewhat blindly sought for in previous definitions. But it must, it appears to the writer, differ from all definitions yet proposed in this, that it will be founded on some single peculiarity of means, methods, or results easily recognisable as radical. That is to say, the definition of Economics to be authoritative must be sought by deductive rather than by inductive processes, which have hitherto been the only ones applied to the problem. The writer, therefore, in his attempt to define Economics, proposes to commence at the other end and to seek out some peculiarity pertaining to some of the means, methods, or results of the general class of voluntary human actions, of which economic actions appear to be a subclass, so radical and fundamental, that the group of phenomena, possessing this peculiarity, and the co-ordinate groups distinguished from it by cognate peculiarities, will each necessarily have more in common than can be obtained from any other grouping.

Third, as to the function of the Entrepreneur, or, as the writer prefers to call him, the Enterpriser, more has been accomplished, though the development of the conception has, until very recently, been somewhat sluggish. Adam Smith, as was quite natural, hardly distinguishes

him from the capitalist. As a matter of fact in his time both functions were so generally exercised by the same individual—the cases were so rare in which the owner of capital did not employ it himself, and the distinction between the two functions, radical as it is, was yet so unobtrusive that it naturally escaped his notice. Consequently we find Adam Smith conjoining interest and profit under the term "profits of stock," which he seemed to regard as a homogeneous quantity, or so nearly homogeneous that any distinction between the constituent parts was negligible. And in this he was followed, more or less closely, by succeeding thinkers, until the advent of the younger Mill; and even Mill accomplished little towards the explanation of profit. The circumstances, of course, which forced economists to consider and study the difference between the capitalist and the entrepreneur, were the creation of joint-stock companies, and the enormous development of the modern system of credit, from which a present industrial condition has arisen, in which a great, perhaps the greater, part of capital is not employed by its owners, but loaned to others, who are more entrepreneurs than capitalists, and who assume the responsibility of its use or employment. Instances to be sure are extremely rare in which the individual

entrepreneur is not also, to some extent, a capitalist, but there are so many cases in which the entrepreneur function is greatly predominant that students have been forced to consider wherein the two functions differ. Without further tracing this development, it may, I think, be stated that the following are the prevailing conceptions of the nature of profit, and the function of the entrepreneur.

Profit is acknowledged to be a peculiar form of income, differing essentially from rent, wages, or interest, and entitled to rank with them as a fundamental form of equal, but only equal, theoretic importance. It is also identified with the "residue of the product," after the fixed claims of land, labour, and capital are satisfied. And it is looked upon as the income peculiar to the entrepreneur, who is regarded as "the co-ordinator of land, capital, and labour, without furnishing either in his own capacity." Just what is to be considered the exact content of "co-ordinator" in this connection has never, so far as I am aware, been very definitely stated. Perhaps, carefully defined and limited, it would be found to coincide closely, possibly exactly, with the claim of the writer that the peculiar function of the economic entrepreneur is the assumption of responsibility in industrial undertakings. As I understand the phrase, "to co-

ordinate" is to establish purposely new and harmonious relations. It is to make such arrangements as are expected to bring about a preconceived and desired result. Strictly speaking, a co-ordinator is not only the one who plans, but also the one who intelligently executes a plan, and the two may be, and usually are, different persons. The executant, in carrying out the original plan, has to adjust details and this involves a certain amount of subsidiary planning on his part, but his function in the economic productive process is universally recognised as labour, and the income obtained by him as wages. Even the fact that he is in some degree held responsible for the manner in which he executes does not include any element of economic profit in his income. If he is an especially able executant of the particular kind of work he is engaged for, he can indeed command higher wages, and, considered from his own individual point of view, the difference between the wages he commands and the wages he could obtain in some other occupation is a profit, but it is evidently an individualistic and not an economic profit. The recipient of salary or wages will indeed, if analytically inclined, apportion them as partly the reward of his physical and mental exertion and partly as due to his choice of an occupation, but

to the person who pays wages and salaries they are predetermined costs and contain no element of profit. Neither is the originator of a plan, afterwards executed in accordance with his suggestion, always entitled to a profit, even when he is the executant as well as the originator. A farm-hand who suggests that something be done on the farm and is told to go ahead and do it, earns wages and not profit. It is only when the co-ordinator subjects himself to the result of his own co-ordination, or of the co-ordination of others, that he becomes the recipient of profit. As the advocates of co-ordination speak of "ownership" as necessarily involved in the function of the co-ordinator, it would appear that this is recognised by them, but they seem unwilling to regard the responsibility and the risk, inseparable from the ownership of the product, as more than an incident and insist that the responsibility of ownership falls upon the entrepreneur as a capitalist, notwithstanding ownership itself being a function of the former. I cannot think such a use of the term legitimate, but if the co-ordinator should be exclusively defined as the one who subjects himself to the results of co-ordination, the person at whose risk and for whose benefit co-ordination is effected, it would be synonymous with the term "enterpriser" as I have employed it.

At present, however, those who reject the Risk Theory of Profit, and insist that profit is the reward of co-ordination and not of the assumption of responsibility, evidently refuse to define co-ordination in any such reconciling sense, for while acknowledging that "ownership" is a function of the enterpriser and not of the capitalist, they yet insist that the responsibility and risk of ownership—that is its purpose and result—fall upon the capitalist and not upon the entrepreneur. Moreover, whatever additional content be forced into it, the term is inadmissible because the connotation of another industrial function, that of labour, cannot be forced out of it. Whatever else it may be, an accomplished co-ordination is the direct result of mental labour on the part of the one who planned it, and of physical labour on the part of the one who executed the plan. Both are co-ordinators, whether or no we consider the owner of the product a co-ordinator also. We are surely barred from denying the title of co-ordinator, in its active sense, to the one who co-ordinates in order to confer it exclusively with a passive signification upon the one who is co-ordinated for. And even if this misuse of the term could be allowed it is a faulty one, as co-ordination, or bringing things into relation, is only one of the means by

which the ultimate purpose of ownership is accomplished. The real question in dispute between those who reject the Risk Theory of Profit and myself is whether the entrepreneur is properly distinguished by only one of the several means he adopts, or by the purpose he has in view. The creation of a product requires that the things to be brought into new relations be first supplied by land and capital, and the use of land and capital is as essential to the entrepreneur as the labour force which can co-ordinate or rearrange them intelligently. All three are means employed for the accomplishment of the entrepreneur's purpose, and we are not at liberty, therefore, to select the employment of one of them as the distinguishing peculiarity of this function.

I am not aware of any attempt to explain away the ambiguity to which I have called attention, or other contradictions and inconsistencies to which attention will be directed later. Suffice it to say that economists generally, in the words of one of them, accept co-ordination as a "singularly felicitous phrase," to express the economic function of the entrepreneur.

CHAPTER II

METHOD

SOME preliminary observations upon method are essential to the proper comprehension of our argument. Not that I have much to add to the literature of the subject or anything really in conflict with the well settled opinions of the great body of economic writers to advance, but because what I am about to say will explain to economists the mental process leading to my conclusions and may be of some assistance to such of my readers as have not made a special study of method. I wish moreover to state at once and for all that I am in entire accordance with the principles of what is spoken of as the "orthodox method" in Economics, and differ only from the common usage of the great body of economists in believing that there should be a somewhat fuller and more rigid application of these principles than has hitherto been attempted.

It is of course understood by everybody that

the "orthodox method" is deductive; that is, it not only includes deductive processes—all reasoning, inductive as well as deductive, does that—but it relies mainly upon them. The question between the advocates of the two complementary processes is only as to emphasis and order of arrangement. In the last analysis both methods are simply systems of classifying.

A definition is only a statement of the class-mark of a group—of the distinctive peculiarity common to every member of a class—which segregates the individuals of that class in a group by themselves, distinguishing them from all other members of the more general class or genus which are lacking in the given peculiarity. The discovery of such distinguishing peculiarities is the object of both inductive and deductive methods, the difference being that the former seeks a class-mark primarily by observation of the mass of phenomena supposedly belonging to the group to be defined, and endeavours to verify the results of observation by hypothesis after hypothesis until accordance with objective reality is obtained, if haply that eventually proves practicable. The deductive process, on the other hand, seeks first a conception of the genus that must include the group we wish to define, sufficiently definite to enable us to divine the nature of the

various differences that must necessarily arise between the individuals composing the genus, or at least the more important of these differences, and then selects as the distinguishing mark of each sub-class the special difference which appears, from the nature of the class itself, to be the most fundamental to the special subject of investigation in hand. Which difference is the most fundamental is often self-evident, but in cases of doubt one principle of division after another is tried until we obtain results not only in accord with observed facts but also which explain these observed facts. This is simply the method that has been followed pretty closely by all orthodox economists in arranging their sub-classes, that is in formulating subsidiary distinctions, but they do not seem to have trusted their usual method in the formulation of the basic ideas of the science. The change of method here suggested is simply the extension of the orthodox method to the resolution of fundamentals.

The inductive process of classification is evidently a very tedious, laborious, and tentative proceeding when a large and heterogeneous mass of phenomena are under consideration. There is, however, no royal road to learning and it is by this process alone, difficult as it is, that the first steps along the road must be

taken. Moreover the way is beset with pitfalls, as apparent resemblances may eventually turn out to be fanciful or fallacious, or with little or no bearing on the special subject in hand. Both on these accounts and because an examination of particulars can never be exhaustive the unaided inductive process can never determine positively just what phenomena are rightfully included in any given class; neither can it afford us any decisive test as to the importance of any peculiarity it has detected. The number of the peculiarities which can serve as class-marks is almost infinite, and a general classification based upon them indiscriminately would only lead to confusion worse confounded. The intelligent organisation of our knowledge can only be founded upon a discrimination among peculiarities which the inductive process, that is observation and comparison, cannot itself furnish. Finally, if I should succeed in demonstrating the existence of a clearly demarcated class, a simple fact is all that would be obtained. But an unrelated fact is practically worthless. It is the relations, especially the causal relations, between facts, and not facts themselves, that constitute knowledge; and it is the organisation of such relations that constitutes a science. This involves an understanding of causes, which unaided

induction is powerless to afford us. Because every man we have ever known or heard of is mortal is not the reason that men are mortal. An observed fact can never explain itself. As the whole process of induction, as commonly conducted, involves verification, deduction is also included so far as it serves that purpose. But the final object of the process is only to prove the validity of the induction. In the deductive process the final object is to obtain the deduced result as a necessary consequence, and in this process the only province of induction is to supply the premises for deduction.

In contradistinction to the fallibility of the inductive process as a process, deduction, considered simply as a process, is infallible. As a matter of fact there is nothing that in itself is quite so positive as deduction. The logical process by which we arrive at the conclusion that John is mortal because John is a man and all men are mortal, is indisputable. Given the same premises similarly conceived, every human mind—the weakest as well as the ablest —must arrive at identical conclusions. If a deductive conclusion (not a mere verbal juggle) is erroneous, the fault is never in the deductive process itself but in the premises upon which the deduction is based. But these premises are, either immediately or ultimately, more or less

clearly conceived observed facts, obtained therefore by induction, which, when analysed, is only observation and comparison for the purpose of detecting resemblances and differences by means of which we can form a group about which certain things can be affirmed. A deductive result can therefore be hypothetical only to the extent in which the inductions upon which it is founded are imperfect. A deduction must be as true as, and can be no truer than, the premises upon which it is based. To attain indisputable truth by its means, we must start from unassailable premises. Deductive results so derived are items of positive knowledge, and just as much so as any observed fact whatsoever. Are such unassailable premises obtainable for the fundamental conceptions of Economics?

It must not be hastily inferred from what has been said that we have arrived at a veritable *impasse*: that we cannot deduce except from premises obtained through induction, and that we cannot make inductions that are not more or less hypothetical, and that therefore we cannot arrive at any positive deductive results. Of course in one sense this is true. As we cannot rely implicitly even on the evidence of the senses, the one thing we can be absolutely sure of is our self-consciousness.

But the existence of the non-ego and the general reliability of the senses once posited, our items of knowledge concerning the non-ego can have varying degrees of certainty, which is to say that our inductions concerning the nature of the non-ego can vary in positiveness, and such of those inductions about whose correctness there can be no practical doubt we are accustomed to regard as positive knowledge—and these inductions of course form a basis for deduction capable of yielding equally positive results.

So far I have only recapitulated and rearranged what has been said by others on the theory of method. I am now to note a circumstance which so far as I am aware has been overlooked—namely that the reliability of our inductions, or in other words the accuracy of our observation, varies usually at least with the commonness and universality of the observed class. Or, to express the idea in more conventional language, the wider and more inclusive a genus the more readily will observation detect its existence and general characteristics. Thus the broad distinction between the animal and vegetable kingdoms, as they are each a wide and inclusive genus, was so open to observation that the induction that classified them was made before the dawn of history, but the sub-

division of these genera into species is hardly yet fully accomplished, and the further subdivision of species into varieties is yet more unsettled. It is true to be sure that the line of demarcation between animals and plants is not yet wholly determined, as organisms exist which cannot be positively affirmed to be animals or yet plants, though we can assert them to be either one or the other or the connecting link between, or, in other words, to belong to the yet wider and therefore more clearly apprehended genus of living things. Absolute certainty as to just what individuals are included in a class cannot, of course, be obtained inductively, but the existence and general character of a class can be positively established by observation, and that is sufficient as a foundation for theory, though not perhaps always sufficient for its practical application in a few extreme cases. Such genera as the universe, the sidereal system, living matter, the animal, vegetable, and mineral kingdoms may be positively regarded as indisputably established by induction, and deductions based upon them as major premises, and upon other equally indisputable genera as minor premises, are matters of equally positive knowledge. Whenever our deductive results lack positiveness, that is when they are founded on more or less

hypothetical premises, it is often because we have not gone back far enough for the genus dependent wholly upon observation. Therefore, what I shall endeavour to do is to go back two steps farther than others have done for the inductive result, upon which economic deduction is to be primarily based. The inductively obtained conceptions which economists have hitherto utilised as their original bases for deduction are the four productive factors, which they have distinguished from each other wholly by observation. Unfortunately the distinctions between them are not obvious enough to be precisely and indisputably obtained by observation, and consequently different individuals have somewhat different conceptions of these factors and their functions, and we have no authoritative test for deciding between these varying concepts. These variations are not perhaps sufficiently serious to invalidate many economic results, though, as we shall see later, they are much more radical than would naturally be imagined. The trouble is that economic teachings must lack authority so long as the fundamental assumptions of the science are at all dubious, and that even the best economists are far from any agreement among themselves as to fundamental concepts is evident enough from nearly all discussions of eco-

nomic theory being so heavily encumbered by laborious statements of the author's conceptions of the terms employed, and by each writer pointing out the differences between his conceptions and those held by his opponents. What I shall attempt is to arrive at conceptions of the economic functions by means of deductions based upon a definition of the scope of the science, deduced in its turn from the inductively established genus of which economic activities are a sub-group. And I believe that I have gone far enough back to entitle me to claim that my definition of the science and my concepts of the four productive functions are positive and authoritative; that is, that there is a logical necessity for accepting them, and if so that they are as positively established as any fact of the Natural Sciences, and all excuse for disputants differing as to the exact content of these terms is destroyed.

Of course, quite the same degree of positiveness cannot be claimed for the subsidiary distinctions of the science or for the practical application of economic theories. As we proceed in the development of the science, we have to rely more and more for our minor premises upon narrower genera not so securely established by observation, but it will be apparent, I hope and believe, that these second-

ary inductions will gain greatly in probability from the final determination of the major premises to which they are applied.

The idea seems to be so deeply rooted that Economics is discredited by its method, that, although needless for economists, a few observations for the benefit of my non-economic readers may be allowable to show why it is that, while the inductive method is natural to and the only proper one for the Natural Sciences, the deductive is the one almost exclusively adopted by students of economic theory and of the Moral Sciences in general. Some decades ago the Historical School entered its protest against deductive methods in Economics and obtained disciples, considerable both in number and ability. Though this protest was beneficial in calling attention to the danger of reasoning from poorly established premises, and though the labours of historical students have not been wholly fruitless in matters of verification and practical application, they have contributed absolutely nothing, so far as I am aware, to the positive establishment of economic theory, and their protest against the orthodox method has gradually died away until only a few echoes of it are left. And we are now, I think, in a position to understand why. It is not that the inductive method to which they

would restrict the moral as well as the physical sciences is a faulty one, but because it is not so applicable to the former as to the latter. Theoretically it is perfectly possible to detect the class-mark of a class by means of observation and verification alone, but the difficulties are practically insuperable to finite minds except for such widely inclusive genera as I have called attention to. Moreover, when, as is conceivably sometimes the case, a sub-class in any of the Moral Sciences could be determined either way, the deductive method should be given the preference for two reasons. It is more authoritative because founded on a more indisputable induction, and it affords us an additional and different kind of knowledge—namely, a perception of the operating cause. Induction establishes a fact; deduction discloses the reason as well. The discovery of a physical fact leads us indeed to seek its cause, but when found the cause is simply the first term of a sequence. Why it is inevitable we can never know. The Natural Sciences are concerned with the *Non-ego;* the Moral Sciences with the *Ego*—with volition, which is an active cause, in an entirely different sense from mere sequence. Not only are the Natural Sciences able to avail themselves of experiment and isolation for purposes of verification, but the

sequences they establish are invariable, because the forces to which change is due are also invariable in character. In the Moral Sciences, on the other hand, experiment and isolation are so difficult as to be impracticable, and they would not be decisive if they were practical, because the cause of moral actions is volition, which is not only dependent upon perception but is a more or less variable quantity, as the force and character of motives change as ethical, social, and economic development occurs. We cannot be sure, for instance, that laws enacted in Greece or Rome would produce the same or even very similar results in America or England, whereas chemical reactions are not only immediate and automatic but always and everywhere the same. Customs which enrich one nation might impoverish another. We are unable therefore to make any certain inductions from the past experiences of the race. All that the Moral Sciences can yield us is a knowledge of the tendencies of human nature, as we know it, under given circumstances. We can, I think, have as positive a knowledge of the existence, character, and direction of these tendencies as we can acquire of physical sequences, but we cannot measure them quantitatively and cannot therefore predict their resultant except in a very general way. Never-

theless the moral law back of these tendencies is as immutable as the physical principles responsible for such sequences as we discover by induction. What men would naturally do in any given circumstances never changes, but what they will do and how soon they will do it is another question. Both are questions of primary importance to any scheme of betterment, whereas the inductive results of the Natural Sciences, beyond the satisfaction of our curiosity, are only of moment to the race because of their influence as environment upon our volitional tendencies.

All this is well understood by economists but does not seem to be so well understood by those whose attention has not been called to the subject of logical method, and among them a tendency certainly exists to discredit and neglect the Moral Sciences, and especially the teachings of Economics, because of the supposed inferiority of the method necessarily employed. And it certainly will do no harm to remind this class that all it concerns mankind to know and understand can only be acquired as a result of deduction, and that items of knowledge inductively obtained are only of value on account of the deductions which can be based upon them. Be all this as it may, Economics will certainly gain in au-

thority when its fundamental terms are more positively established, and it seems to the writer that the only hope of establishing them on firmer foundations lies in the extension of the recognised or "orthodox" method of the science to their resolution, and that any taint of scholasticism and hypothesis rightly chargeable against economic theory is due not to the orthodox method being mainly deductive, but to its not being deductive enough, or perhaps I had better say, from too early a demand on induction for its premises.

When the man of general culture seeking that modicum of knowledge of Economics that no gentleman's cranium should be without, takes up a treatise on the subject he finds that it treats of the relations of landlords, capitalists, labourers, and entrepreneurs, and of the four different kinds of revenue—rent, interest, wages, and profit—obtained by the four industrial factors. These are all terms of common speech and our student supposes that he understands about what is meant by each one of them. He shortly discovers, however, that his author employs these terms in a different and more precise signification than he has been accustomed to attach to them. He soon realises that his own ideas of them are hazy and indefinite and unfit for logical use. He either gets all jumbled up and remains

so for the rest of his life, or he sets to work to re-form his previous conceptions so as to bring them into accord with those of the author. He finds this pretty hard work, because, although his author's conceptions are far more complete and precise than his own, they differ from his own in this respect only in degree. His previous use of the terms was founded upon the various meanings he and others apparently attached to them in conversation, in which of course they had been very loosely employed. His author has indeed gone beyond this. The attempt to use the terms logically in deductive argument has disclosed many ambiguities and some contradictions in their popular use, which he has endeavoured to avoid and reconcile in his own employment of the terms. This attempt has met with a certain degree of success, and resulted in concepts much more accurate and precise than the popular haphazard usage. Nevertheless they differ from the popular conceptions only in degree and not in kind. Like them they are wholly founded upon observation, a wider and more careful observation to be sure, but by exactly the same logical process. There is, however, a certain sort of verification of the results of this observation in that the new conceptions are less ambiguous and better fitted for logical use, but such verification is not absolute

enough to endow the scientific usage with authority.

Having mastered his first author and looking at economic phenomena through his eyes, our student now takes up another author of equal repute and finds him using these fundamental terms in somewhat different significations, which lead him of course to different conclusions. Our perplexed student learns that his two authors have discussed some of the points of difference between them, and finds that the controversy consists mainly in an attack of each on the fundamental conceptions of the other and a defence of his own. Further research reveals that there is a third and a fourth, or perhaps a dozen other economists, who differ, at least slightly, in their fundamental conceptions, not only from the first two, but also from each other.

For a certain order of keenly intellectual and able minds the situation has its charms, and they become specialists—a tribe of intellectual fox-hunters to whom the glory of the chase is everything and the fox itself nothing. But it is at this point that the man of general culture gives up in disgust and despair. He feels indeed a great respect and admiration for those who keep on in the pursuit of "logic for logic's sake," but he refuses to accept their guidance in the practical application of economic principles.

Now why does not the ordinary man, instead of stopping at this point, go on to discover and determine which of his teachers is correct? The reason is that there is no common ground of appeal. Each disputant asks us to accept his concept because it is the most reasonable, that is the most reasonable to him, and he strives to make us see the phenomena through his eyes. He asks us to observe what he has observed, to make the same inductions that he has made. But this is something which personality forbids. We can indeed see what another points out, but we see it with our own eyes and not his, and consequently a little differently. And even if we should see with his eyes how can we be sure that his are the "all-seeing" ones? The finite can reach only a varying degree of certainty by observation and induction. The advantage in positiveness which deduction has over it is that it can select the most certain results of observation as a basis for its own infallible processes.

To return to our dozen disputants, we cannot select the conception of any one of them as undoubtedly true because it appears to him to be pointed to by his general observations, even if our own observation agrees with his. But if one of the disputants comes forward with a conception which he does not ask us to accept as his, but because it is a necessary consequence

of two observed circumstances on the reality and accuracy of which all observers agree, we cannot withhold our acquiescence if we would, once we have fully comprehended the two circumstances. Major and minor premises admitted, the conception in question follows as a matter of course. When economists define their fundamental terms in this manner, the man of general culture and the leaders in practical affairs will become their allies and coadjutors, but not before. The fact that the comparison of observations and the conflict of opinions has resulted in a growing consensus of concept is not enough, for it can never bring about such a practical identity of conception as will be authoritative.

CHAPTER III

PRINCIPLES APPLICABLE TO DEDUCTIVE CLASSIFICATION

DEFINITION is merely the formulation of the distinguishing peculiarity of a class. An economic term is simply the name given to a group of economic phenomena that are alike in a certain selected particular; and the usefulness and acceptability of the term depend upon the wisdom with which the selection of the distinguishing particular is made.

Any peculiarity can serve as a basis for grouping individuals in classes by themselves, because a common characteristic subjects all individuals possessing it to some similar influence; but, unless the selected point of resemblance is germane to the subject under investigation, the resulting grouping will give no valuable information on that special subject, though it may not be useless for other purposes. Thus the grouping of animals by their colour might help to explain how certain

animal secretions were affected by climate and habitat; but it could hardly afford any explanation of the evolution of species. But even when the point of resemblance is entirely germane to the general subject in hand, it cannot always be selected as the fit class-mark of the group we desire to segregate. The peculiarity, even when confined to members of the group, may not extend to all of them, which is to say that it is the class-mark of a sub-group. And when it does pertain to all of the members of the group, it may be only attendant upon, or the consequence of, another more vital peculiarity, which is the real class-mark of the group in question. And again, any mass of phenomena may be divided into an almost infinite variety of groups or sub-groups, only one of which system of groupings will be found adequate for a specific purpose. The chief difficulty therefore of attaining that orderly arrangement of our knowledge which makes it a science, lies in the selection of the distinguishing peculiarities in accordance with which the items of our knowledge must be grouped to bring out their inter-relations most plainly.

Evidently we have here an almost hopeless task, unless we can discover and utilise some general principles, that can serve as guides to the selection of the proper peculiarities to

effect the particular grouping, which alone can place the included phenomena in their really vital relations to the environment and to each other. So long as we are forced to depend wholly or mainly upon our intuitive conceptions as our guides, we can never arrive at positive conclusions, although these intuitive conceptions may be near enough to the truth to afford us considerable insight into the relations which really exist—an insight, however, necessarily more or less distorted, unless, which can very rarely be the case in the Moral Sciences, our intuitions happen to be verifiable as exactly correct. In the Natural Sciences the validity of our preconceptions or surmises can be tested by the process of isolation and experiment, but even in these sciences our progress is greatly accelerated by the discovery of any general law that can serve as a premise for deduction. Thus the insight into the phenomena of nature recently acquired by deductive processes, based upon the law of evolution, is of greater account than the inductive contribution of several preceding centuries, during which this premise for deduction was lacking. And the real reason that recent progress has been so rapid is the guidance afforded by this principle in the selection of the fundamental peculiarities which alone are

competent to serve as the basis for a really scientific classification.

Now by whatever process definitions are arrived at, those who criticise them usually base their objections upon the assertion that the resulting grouping is not that which brings out most clearly the inter-relations which are essentially under consideration. And to back up their preference for one grouping over another they are accustomed to appeal, at least by inference, to this or that principle of classification. It would seem therefore that the only method by means of which a selection can be made between two or more proposed definitions, with somewhat different contents but intended to formulate the same idea, is by the application of these principles. I am not aware, however, of any systematic treatise on the principles of classification as especially applicable to the deductive method, and I will therefore venture to call attention to some of the more important of them.

The principles of deductive classification which it seems to me should govern the definition and use of economic terms, though often neglected, are by no means novel or unrecognised. Whatever merit this presentation of them may be judged to possess is to be found in their assemblage, and in the recognition of

their obligatory character. The reason that they have not received the attention they deserve and have not exerted the influence they should over the development of economic thought, is, I think, to be found in two circumstances, which are that some of them apply only to the deductive and not to the inductive methods of ascertaining group formation, and others of them are inapplicable even to deductive methods before the definition of the general class—that is in Economics the science itself—is satisfactorily formulated. Manifestly, the reason economists have never attempted any authoritative determination of their fundamental concepts is because they have looked upon such determination as the final goal of the science, only obtainable inductively through synthesis and undeterminable deductively by analysis.

Inductive classification, in its procedure from the particular to the general, can logically determine the sub-classes first and trust later investigation for finally accomplishing the synthesis which binds the sub-classes together; but even in this process the determination of the sub-groups is more or less aided by intuitive perceptions of what the general class probably is. When, however, we possess this knowledge, we are not confined to the inductive process to

obtain our sub-groups—that is to say, instead of observing and comparing individuals in the hope of detecting resemblances or differences by which they can be divided into groups, we can examine into the nature of the general class itself to find out in what ways the individuals composing it must, in the nature of things, differ among themselves; and select that one of those ways as the principle of division, which most clearly segregates the particular sub-group we wish to study.

Therefore the first essential in deductive classification is a sufficient conception of the general class to which the group we wish to define belongs. Of course a complete knowledge of the general class connotes as complete a knowledge of the sub-groups into which it can be divided, and if an absolutely complete comprehension of the general class is an essential to its use as a major premise in deductive classification, the deductive process becomes possible only when it is no longer of use. Fortunately this fulness of knowledge is by no means essential to positive results. All we need to be sure of is a sufficiently definite conception of the general class to enable us to detect the really radical differences between the individuals composing it. As we have already had occasion to observe, the wider and more

inclusive the class, the easier it is to obtain this sufficient conception inductively. Such widely general classes as the universe, our own planetary system, the earth, the mineral kingdom, and mankind are all positively known to us to exist, and are precisely enough conceived to be safely employed as bases for a positive demarcation of the included sub-groups, as can also a great many other classes, narrow indeed as compared with the above, but wide as compared with classes too unobtrusive for their class-mark to be readily detected. The first step then of deductive classification is the determination of the general class which must include the sub-classes we are trying to define. This established, we have a major premise, and the want of positiveness of any deduction based upon it will be wholly due to some lack of positiveness in the minor premises employed.

The second principle of deductive classification, by which we seek our minor premises, is the obligation of searching out and selecting peculiarities, which in the nature of things are necessarily possessed by only a part of the individuals composing the general class. Such a peculiarity becomes the class-mark of the group of individuals possessing it, and its negative or opposite the class-mark of the groups not possessing it. When, however, the peculiarity is one

of a number of co-efficient peculiarities, we have necessarily more than two sub-groups. Thus if we are dividing the general class " houses " into groups according to the number of stories in each, we would have one-story, two-story, three-story groups of houses up to the twenty-five story sky-scraper.

Now amid the innumerable differentiations in accordance with which a general class can be subdivided, there can be only one capable of segregating and explaining the particular group we are desirous of investigating. This difference is commonly and correctly, spoken of as the fundamental one, and the next step in deductive classification, after we have obtained our general class, is the discovery of this fundamental distinction. In the Natural Sciences this may be a matter of considerable, and in some cases insuperable, difficulty, for in them we have to do with sequence merely, that is with forces that are known to us only by their manifestations in sequence, and we can never get behind these sequences to understand why they are inevitable—their purpose and active cause is beyond our ken. We have, therefore, to rely wholly on observation for our knowledge of the first term of a sequence. How the character of this first term will manifest itself in new relations is at the best only an inference. In the Moral

Sciences however we are always dealing with purpose—an immediately known active cause—and our fundamental difference must always be a distinction between motives; that is, a difference which affects motive. These differences can be only of three kinds, namely: differences in the character of the ends to be attained, differences in the means for accomplishing ends, and differences in the method adopted to secure desired ends. This fact greatly simplifies the search for fundamental distinctions, as we can usually discern without much effort which is the kind of difference suitable for the purpose in hand. This greatly narrows the field over which we have to search for the distinguishing peculiarity or co-efficient peculiarities fundamental to any investigation we are engaged in. In this search, so confined, we are moreover greatly aided by our intuitive perceptions of what distinctions in the nature of things must be most radical—must go to the root of the matter. We at once recognise some peculiarities as incapable by their very nature of exercising much influence, while others are as quickly recognised as necessarily producing important results—thus whether a moral agent acts for himself or in the interest of another cannot but lead to a great diversity in his actions, and this difference is the distinguishing peculiarity be-

tween egoism and altruism, two terms that are sufficiently defined by their names, and that are as positively established as any fact of the Natural Sciences, whereas moral peculiarities, dependent on environment, while interesting, cannot be fundamental. There may, to be sure, be two or more differentiations between the members of any general class which are important, and each of these may be fundamental for a separate purpose, and it may not be quite plain in all cases which one of these is the fundamental one for the special purpose in hand. But it rarely occurs that we have many at all suitable principles of division to choose from, or that we have long to puzzle over our selection, for usually a very superficial verification is sufficient to rectify our choice. It is at this point that deductive classification in the moral sciences gives evidence of its superiority over the inductive. The verifications of the fundamental distinctions by the latter must include some examination of every individual possibly embraced by the definition, because we are reasoning from the particular to the general and the general cannot be surely established, unless we have made it certain that all particulars, possibly included in it, agree in the point of resemblance we are endeavouring to establish. When on the other hand we are engaged in deductive definition we have

a true sub-class the moment we have detected a peculiarity, possessed by some members of the general class and not possessed by others, because the possession of the peculiarity subjects its possessors to similar influences. All that we have to determine further is whether any such sub-class is the one required for the purpose in hand, a comparatively easy matter, though by no means free from all difficulty. Just what individuals are included in the sub-class is a matter of indifference, except as it helps us to determine whether the sub-class possessing the selected peculiarity is the sub-class needed for our especial purpose, and in almost all cases this can be positively determined by an examination of individuals comparatively incomplete. And when as will often, indeed usually, happen examination discovers certain individuals to be excluded from the class that our preconceptions had included, we are entitled to claim that our preconceptions are erroneous, and that these individuals should be excluded, so long at least as no ground of distinction can be pointed out more fundamental than the one which excludes them. Nothing can be more suggestive and fruitful than the occurrence of these examples of phenomena that only apparently belong to a group; as we are at once led to a more precise examination, sure to eventuate in a better under-

standing and classification of them. And this because if the selected peculiarity really roots deep into the nature of things, the group possessing it is a real group, possessing plainly marked and important characteristics that entitle it to be considered separately. If we find it to bear a close relation to the science we are considering, a place has to be found for it, and any one disputing the place claimed is under the obligation of pointing out a better place, the existence of the class as a class being no longer contendable. Cases of course will occur in the Moral Sciences when discoveries of this kind arise, and they always mark an advance in the science in which they are made. Moreover they occur quite frequently when the first application of the deductive method of classification is to the sub-division of a sub-class which is itself as yet only inductively determined, and therefore very probably neither accurately nor authoritatively, but only approximately, settled. The positive determination of such a sub-class by deduction will generally expose inaccuracies in its previous subdivision, as the inaccuracy or incompleteness of the major premise connotes inaccuracy and incompleteness in the deductive results obtained by its use. We have, therefore, no right to be confident of any subsidiary definition in a moral science until the most general

class of all included in the science, that is the subject matter of the science itself, is deductively established from indisputable premises and therefore satisfactorily defined.

The third requisite for valid classification is that each sub-group should be demarcated from the others, not by means of general differences or resemblances between individuals, but by the one point of difference or resemblance that is the most germane and radical to be found, and is, therefore, the fundamental one. Cuvier applied this principle to biology when he subdivided the animal kingdom into groups demarcated from each other by peculiarities of their bony framework and internal organs. Why are differences founded on these peculiarities fundamental to biology? Simply because observation has shown us that they vary less rapidly than other peculiarities of animals, and therefore mark the evolution of species, and contain the history of the development of life from its simplest to its most complex forms, which is the most important problem of biology. In South America a species of moth so closely resembles a species of butterfly as to be almost indistinguishable from it, and the two would be classed together by any one classifying from general differences and resemblances, but such a grouping is manifestly of no value to the science of biology.

Now I fear economists are frequently open to the charge of disregarding this essential principle. For instance some of our ablest economists identify land with capital because a general resemblance arises from the fact that the value of land can be capitalised, or because more capital has been expended upon land in drainage, fences, and other improvements that affect its productive power, than the value of the land amounts to. But does not the distinction between land and capital, which is really fundamental to the science, arise from the nature of the use to which they are put, or to their function in production, rather than from any general resemblance due to their having a common denominator or a common origin? This is necessarily so because the character of the motives leading to the utilisation of land and capital and to their appropriation or accumulation varies with the nature of the income expected, the character of which is dependent upon function and not origin.

The fourth requisite of valid scientific classification is that the various co-classes, into which any given genus is divided, shall each be distinguished by a peculiarity of the same kind. If I may be allowed to illustrate by the controversy over the Risk Theory of Profit, it should not have required demonstration, if this principle

of classification is correct, that the reward for the assumption of a risk, when the assumption of risk is once recognised as a separate industrial function, could not accrue to any of the other productive factors so long as they were distinguished from each other by the character of their functions. So long, that is, as rent, interest, and wages act as the incentive to the use of land, the use of capital, and the exertion of labour, it should have been axiomatic that the reward of risk must serve as the incentive to some industrial factor other than land, capital, or labour, and could not accrue to the co-ordinator as such, who is only a labourer, or to the capitalist as such.

A fifth principle of classification is that the subdivisions of a genus shall not overlap, or in other words that no individual shall belong equally to two or more of the subdivisions. It is not meant by this that we should always be able to determine positively the sub-group to which any given individual should be assigned. Our knowledge of the specific individual may be insufficient, especially in a classification of actions in accordance with the motives that cause them, as cases constantly arise in which the motives are complex. Nor is it intended that compound individuals may not be assigned to two or more groups, according to the point

of view from which they are regarded. Thus the activity of judges, soldiers, and policemen is social so far as society's action in hiring them is concerned. Society's motive in hiring them is the common good; and the actual product of their labours is an element of social, not of economic "weal." On the other hand the actions of this class, viewed from the standpoint of their own motives are economic. Their incentive is the salary, wages, or fees society pays them; and their labour is productive to themselves of an income of wages, composed of purchasing power, which is an economic quantity. We have in this case of combined human activity only an instance where one party to the combination is actuated by social and the other by economic motives; and the activity itself is social or economic according to the standpoint from which we regard it. But there is no overlapping of sub-groups, nor any necessary confusion of thought because, when the point of view is once selected, there is absolutely no doubt as to the class to which the activity in question belongs.

A sixth principle of classification is that the distinguishing peculiarity utilised should be dynamic and not merely incidental. Thus the definition of Economics as the Science of Exchange, when the exchange between persons is

intended by the term, gives practically the same scope as the definition I will shortly propound, because, as has been shown elsewhere, exchange is not only a necessary part of the only process by means of which activities can be combined for personal purposes, but it is incidental to no other process. But the definition of Economics as the Science of Exchange was rightly abandoned and neglected because it teaches us nothing of causes. Exchange is a means, not an end or a purpose; and the explanation of volitional activities must be sought in the motives which cause them and not in the means incidentally adopted to accomplish purposes.

A seventh principle of scientific classification is that the distinction between species must be founded on a difference in kind, and not one of degree. We do indeed in common speech draw distinctions of degree, as when we speak of larger animals as compared with smaller, and we affirm rightly enough that certain differences between animals are due to their relative size. But classification founded on degree is unfitted for scientific use, because it affords no basis for drawing a dividing line between the individuals possessing, for instance, the peculiarity due to their larger size, and the individuals lacking the peculiarity because of their smaller size. Moreover the peculiarity in question,

being relative, could be affirmed of, or denied to, any animal, accordingly as it was compared with one smaller or larger than it. Individuals cannot therefore be definitely grouped by differences in degree, and the precise and orderly arrangement of knowledge, in which science consists, cannot be obtained by any classification founded on degree.

This summary of the principles governing deductive classification, though by no means exhaustive, and perhaps too concisely stated, suffices to indicate the only process that can rightly claim authority. The validity of the principles laid down will hardly be disputed, as more or less regard has always been paid to each of them, though rarely to all of them by any one writer, nor has the obligation of conforming every economic definition and classification to all of them ever, so far as I know, been distinctly recognised and submitted to.

CHAPTER IV

A POSITIVE DEFINITION OF ECONOMICS

THE object of all consciously directed human thought and action is the enjoyance of happiness and the avoidance of pain, or in other words "well-being" or "weal." The fundamental distinction between human activities is evidently between the altruistic and the egoistic, the latter division being of course the one in which economic activities are included. The problem of defining Economics is therefore only resolvable by differentiating economic activities from other egoistic human activities.

Now there are only three methods of deductively classifying egoistic activities possibly applicable to our purpose, namely: first, by the character of the ends to be attained; second, by the means adaptable to the attainment of ends; or, third, by the methods adopted for the attainment of ends—as in these three differentiations all possible variations of motive are

involved. We can say that some egoistic activities are directed to the attainment of physical benefits, others to intellectual progress, others to moral development, etc., but a moment's consideration will make it evident that the character of the result of human actions is not the principle upon which we can found our classification, because in many instances results of the same character can be obtained by either individual, social, or economic endeavour. We have no better success when we turn to the second possible method of classification; namely that of the means (in the narrow sense of the term, exclusive of methods) adaptable to the acquisition of "weal." We can, and do, use our intellectual powers, our physical powers, and the powers of nature, mechanically adapted, for the enhancement of our well-being; but economic activities refuse to group themselves under any one of these headings, as all these forces are alike exercised in individual, social, and economic endeavour. Since the distinguishing peculiarity we are in search of is to be found neither in the character of the result obtained, nor in the means employed to bring about results, it must depend upon a difference in method. If, then, we can discover any radical difference between the methods employed in individualistic, social, and economic activities, we are forced to define

each of the three kinds of activities, in terms of its peculiar method.

When we approach the problem of defining Economics from the standpoint here indicated, we cannot fail very shortly to appreciate that there can be no more radical or fundamental difference in method between Individual, Social, and Economic egoistic activity than this: the first class of actions are those of the individual acting by himself alone without any combination with others, and for himself alone. When an individual by his own unaided efforts creates a product not for his own consumption, but to be exchanged, his activity is of course combined with that of the person with whom he exchanges. The object of the individual producer for exchange is not the product itself, but the power of purchasing possessed by his product. But a product cannot possess any power to purchase unless something exists for which it can be exchanged. The very existence of exchange value depends therefore on a combination of buyer and seller. The second class of actions are those in which two or more individuals combine to produce a result, or product, the share of which, that will accrue to each individual concerned, is indefinite and indeterminate,—indeed often so indefinite and indeterminate that a considerable, and sometimes even the

greater, part of the resulting benefit will be enjoyed by those who had nothing to do with bringing it about. Or in other words a social egoistic activity is one in which actions are combined for a mutual, social, or common purpose, in the benefit of which each participant in the activity expects only an indefinite and unpredetermined share, almost or entirely unrelated to his personal contribution to production. The third class—namely the economic—are combined actions entered into by each participant because he expects a share of the resulting benefit bearing a definite and prearranged relation to his contribution to its creation.

Tersely expressed, individual actions are those performed by an independent person for personal purpose; social actions, those performed in combination with others for indefinite, or impersonal, purposes; and economic, those performed in combination with others with a definite personal purpose.

It will probably be objected by some that there are other activities, usually considered to be economic, that this third group does not include. In the course of this treatise it will become incidentally evident that these omitted activities are only indirectly related to the subject and are not really economic. The point here to be insisted upon is this; that if the act-

ivities in dispute are really economic it can only be because economic phenomena can be segregated by a more radical and fundamental principle of division among egoistic activities than the one I have utilised. Manifestly this is impossible, as the only more fundamental difference in incentive is when the benefit sought is for others, and that marks the distinction between altruistic and egoistic actions.

Now how can actions be combined for definite personal purposes, that is for a pre-arranged division of the benefit of the result definitely dependent upon contribution? At first sight it would appear that there are two possible methods of doing this. The first is that of communism, in which the product is either equally divided among all individuals or among all contributing to production, or divided in arbitrarily pre-arranged percentages not dependent upon contribution. The second is the usual, or competitive, method in which one of a group of individual contributors hires the others by giving each a definite and predetermined personal reward, based upon his supposed usefulness, and assumes the whole of the resulting benefit, or the ownership of the product.

What we are defining is not a group of individuals, but a group of human actions, segregating those in which the combination is for

definite and predetermined personal ends, however the functions exercised may be distributed among individuals. If we examine into the character of the productive functions it appears that, if the Risk Theory of Profit is correct, not only economic but also individualistic and social functions are divisible into four fundamentally-distinct kinds, two of which—those of land and capital—are uses, that is are acted upon and therefore passive, and two of which—those of labour and enterprise—are active and involve immediate personal sacrifice,—in the one case the pain cost of labour, and in the other the irksomeness of risk and responsibility, whereas there is no personal sacrifice in the use but only in the acquirement of land and capital.

Now in a communistic group each individual is landlord, capitalist, labourer, and enterpriser. His individual share of the "weal" produced by the united efforts of the community is not only practically indivisible into rent, interest, wages, and profit—thus destroying the opportunity for the interplay of economic inducements—but it depends only to an infinitesimal degree upon his own contribution. If he labours honestly and his efforts prove effective, it is not because he has been actuated to any considerable degree by his own personal ends, but because he has been moved by altruistic or social motives,

or because he has been coerced into activity. The motives for the creation of "weal," effective within such a group as the Oneida Community, as at first instituted, are not those which lead men to combine their efforts for definite personal ends, and the resulting actions must therefore be excluded from the group of human activities that our classification declares to be economic. Such combinations are distinctly social because there is lacking a definite personal relation between the incentive to and the reward for combined exertion. It is only when the Oneida Community entered into competitive dealings with the outside world that economic considerations became effective; and the Science of Economics must therefore regard the community as constituting a single economic individual. And if it should ever come to pass that the whole world was organised into a single communistic group, combined human activity for personal ends, and therefore economic activity, would be an impossibility. Similarly in any group of individuals combined for social purposes, the incentive to contribute labour or taxes and to assume responsibility is not personal. When the state pays wages the incentive to labour is indeed personal and will be hereafter explained and accounted for.

The case of a co-operative group is different

from that of a communistic group in that the individuals composing it do not necessarily contribute the use of land, the use of capital, and their labour in the same proportions, nor do they share equally in the product. Such a group differs from an ordinary group of competitive individuals, combined for economic "weal" production only in that the functions of the entrepreneur, the landlord, and the capitalist, or some of them at least, are performed by the group as a whole and not by a selected part of the group. And, as the individual members share the results of the risk and responsibilities in the same proportion as they contribute otherwise to the creation of the product, there is the definite personal relation between enterprise and its result required by our definition. There exist therefore, at least to a considerable extent, similar personal incentives to the utilisation of land and capital, to the exertion of personal effort, and to caution and care in the selection of risks and the assumption of responsibilities, that actuate the members of a group composed of competitive individuals acting under the direction of a single entrepreneur. The internal as well as the external relations of a co-operative group are practically economic and not social, unless, of course, as is apt to be the case in such associations, a certain proportion of the unpre-

determined residue, or of the gross product, is not divided directly among the members of the group in supposed proportion to contribution, but is devoted to social purposes.

Nevertheless, while the external relations of a co-operative group are entirely economic, the internal relations are not always wholly so in practice, because, under this system of industry, the relation of income to contribution is not quite so definite as is the case when the enterprisers are a distinct group of individuals. The manager, whose powers are only delegated to him, and who remains such only on sufferance, cannot well hold the delegators to quite as rigid an account as if he were the owner of the enterprise, or directly responsible to the owner. There is, therefore, some taint of social purpose in all such enterprises, and it is this which, as a rule, has hitherto stood in the way of any long continued success in their operation.

It is also to be feared that trade unionism is infusing a taint of social purpose into the present form of economic activity. The entrepreneur, when forced to obtain his labour through collective bargaining, cannot insist as forcibly as before on each individual labourer contributing to the product in strict accordance with the wages he has been promised. This effect is now being extensively commented upon, as shown

in opposition to piece work, objections to improved processes and machinery, the insistence upon a minimum wage and a maximum of work the individual is allowed to perform, and in various other ways. A trade union really involves some substitution of the social for the economic motive in the internal relations of the group of employees. The union becomes itself an economic individual, and the persons who compose it lose their economic individuality to the extent that they refuse to labour except as members of the group, and subject to rules and regulations, whose purpose is social rather than personal.

The combination of egoistic human activities for definite personal ends involves therefore a certain method of combination as the only one possible for such activities; namely, that some individual, or group of individuals, theoretically and practically distinguishable, must assume the responsibility of the enterprise, and the direction of the undertaking inseparable from the responsibility, and that by so doing the risk-takers necessarily acquire the exclusive ownership of the product, and reward those who contribute the use of land, the use of capital, and personal exertion, not with any share of the product itself, but with stipulated amounts of purchasing power, bearing a definite relation in each case

to each participant's supposed contribution to the result.

A great difficulty in reasoning on economic subjects, responsible perhaps more than any other for confusion of thought, especially on the part of the public, is the failure to discriminate between the individual as such, and the individual regarded solely as the exerciser of a given function. Thus when we speak of the entrepreneur what we are apt to have in mind is the individual who not only assumes the responsibility for the undertaking, and in whom the ownership of the product inheres, but who is also to some extent both a labourer and a capitalist. So also when we speak of the capitalist, it is the individual who contributes capital and not the loaner of capital simply as such that we are apt to consider, and similarly of the landlord and labourer. As a matter of fact, it is impossible to exercise a single productive function separately. Thus, as to a hired labourer the product of a day's labour is the daily wage received, the purchasing power of which is liable to change, he does not wholly escape the responsibility of ownership, and from his point of view as an individual, a certain very small part of his remuneration is the reward of an economic risk. Likewise the landlord has to take the risk of a change in the

value of his holding. As the owner of his land, he is an entrepreneur. It is only in the renting it (to another or to himself) that he acts as a landlord. The capitalist also runs a chance of not being repaid, and a good part, indeed over half, of the gross interest he charges is not interest at all, but insurance. Finally, the entrepreneur is usually a capitalist, sometimes a landlord, and always a labourer. Every individual income is composite and is the joint reward for the exercise of never less than two productive functions. As a different set of tendencies of laws regulate the income arising from the exercise of each function, we fairly jump into error when we reason as if an individual income were subject to only one set of these tendencies.

Another prolific source of error against which the reader must be cautioned arises from the assumption, usually a tacit one, that Economics is concerned with the productive aspect of human actions. Ostensibly by product, an exchangeable product only is meant, and land, capital, labour, and enterprise are considered such only when engaged in the creation of exchangeable products. The trouble is that every result of human activity is a product, but individualistic and social results are not exchangeable, though they are due to the exercise of

the same four productive functions that produce exchangeable values. The attempt, therefore, practically universal, to employ land, capital, labour, and enterprise as exclusively economic terms, thus denying, or at least ignoring the fact that all individualistic and social results are due to the exercise of identically the same functions as those which create economic products, is to invite misconceptions.

It is only when we view the matter abstractly that landlords, capitalists, and labourers can be said to share in the product. The creation of an economic product involves the creation of an equivalent amount of purchasing power; and it is this newly created purchasing power, and not the product itself, which is divided among the productive factors. A distinguishing mark of an economic action is that its governing purpose is not the creation of utility, but the creation of command over utilities in general, or purchasing power. And the point to be observed here is that purchasing power cannot be evolved in any other way than through the utilisation of land, capital, and labour, or of two or more of them combined, by enterprise. Or in other words the "indirect method of production"—that is, the satisfaction of wants through exchange—is necessarily coincident with the combination of human activities for

definite personal ends. Each expression exactly connotes the other.

It may be objected here that the combination between buyer and seller differs in character from that between the enterpriser and his employees. An analysis of the two operations, however, makes it evident, that what difference there is, is not in the character but only in the complexity of the transactions. In the extreme case of barter between hunter and fisher, what the hunter obtains by producing game is not the game itself but the power of the game to purchase fish. When barter is supplanted by the use of money, his power to purchase becomes general instead of specific. The change is not in character but simply in complexity. So when the employer hires a labourer, what he buys is not the effort but the result of the effort, or in other words a new space relation. For this he pays money—that is, abstract purchasing power. If he uses the newly created space relation for his individual benefit, his case is exactly analagous to that of the fisher who buys the hunter's game with money, for the purpose of consuming it himself. If he utilises the new space relations in exchange, his action is similar to that of the fisher who buys the hunter's game, not for his own consumption but to trade for something else. On the other

hand the hired labourer sells the space relations he creates either for purchasing power in general, that is for money, or for a specific amount of food or other necessity—that is, he creates a new space relation on account of its power to purchase either things in general, or a specific thing, which is just what the hunter does in procuring game for exchange. There is absolutely no difference in the essential character of the combination between buyer and seller, and in that between employer and employe. In both cases the object of production is not the product itself, but the power of the product to purchase. It is only the final consumer who is interested in the product for itself. The independent labourer producing for exchange, that is the one who is his own employer, differs from the hired labourer only in this, that he selects the space relations he creates, instead of creating such space relations as his employer selects, because the power of selection pertains to the ownership. In the former case he combines the functions of enterprise and labour, whereas in the latter he confines himself to the latter function, and abdicates the former in favour of his employer.

Instead of founding the primary classification of egoistic activities upon the distinction between individual and combined action, we can

found it upon direct and indirect methods, the direct method being, of course, that in which the special thing desired is produced either immediately, or ultimately by the aid of tools; the indirect method being that whereby the desired object is obtained by making something not desirable for itself, but capable of being exchanged for the desired article. This classification, however, results in exactly the same arrangement as that founded upon combination, the only difference being that in the latter case individual actions form a class by themselves, while social and economic actions are sub-groups of the complementary class of combined actions: whereas in the former case economic actions form a class by themselves of indirect activities, while individual and social actions are sub-groups of the complementary class of direct actions. Although the principle of combination must be given the logical preference, as indirectness is only a means by which combination is effected, and therefore only an incident to one form of combination, which method is logically entitled to preference does not affect our argument, for both classifications involve the same arrangement; and the definition of Economics here given utilises both together, the idea of directness being involved in the term "purchasing

power." This definition may be formulated as follows:

Economics is the study of the interrelations of that group of egoistic human activities which are incited by the expectation of definite personal shares, pre-arranged in supposed conformity to functions performed, of the purchasing power resulting from the joint activity of two or more individuals; and of their outer relations, or how these activities and their results are affected by the physical, ethical, and social environment, and by changes in the environment.

As the purchasing power obtained in a given time by any individual is what is meant when his income is spoken of, perhaps the best terse definition of the science is that "Economics is the science of Industrial Income."

To guard against possible misunderstanding, I would say that by "definite" I mean only pre-arranged, and do not mean pre-determined in amount. The shares of three productive factors are indeed so pre-determined: that of the entrepreneur is not, but it is none the less pre-arranged and defined, in that he is to get whatever is left over after the pre-determined claims of others are satisfied. The word "Industrial" I put before "Income" to exclude the incomes of the thief, the unprofessional gambler, and the speculator—the purchasing

power obtained by these classes not being a new creation of value arising from combined activity, but only an appropriation, or transference, of purchasing power previously created, differing from the income of the monopolist in that the latter is an appropriation of an undue (in the sense of "greater than would accrue under free competition"), but still definite and pre-arranged share of a newly created purchasing power, to the creation of which the monopolist has contributed; and from the income of the professional gambler, who does perform a service for which his dupes are willing to pay.

The definition of Economics I have ventured to suggest differs from all others, with which I am acquainted, in having been obtained by a deductive process, carried out in accordance with, what appear to me at least, sound principles of deductive classification. If I have succeeded in showing that the deductive method of classification is capable of yielding positive results, and if my synthesis of the principles governing deductive classification is sufficiently complete, and if I have correctly conformed to these principles, the definition is a positive one —that is we are entitled to insist upon its being recognised and accepted as segregating a group of human activities very important for us to understand, and so radically different

from all other human activities that their interrelations cannot be adequately comprehended, or their outer relations with the environment traced or understood, so long as their bond of union is ignored, or but indifferently comprehended; which is to say that this group of phenomena is the proper subject for special study, and that conclusions indubitably established as true of the segregated phenomena must be accepted, whether or no they conflict with previous conceptions and whether or no all economic phenomena are included in the group. Certainly no question can be raised as to the economic character of any single action of the group segregated, nor, as I hope to show later, of the excluded actions being primarily individualistic or social in character.

Our definition also attains, what has never before been accomplished, clear cut distinctions between the three universally recognised kinds of human activites—the individual, the social, and the economic. The validity of the definition, as a definition, will I think hardly be disputed, but it may be objected that what I have defined is the Science of Industry, not the Science of Economics. This objection is, as we have seen, closed to those who look upon economics as the science concerned with the creation of exchange value, as the scope of

such a science is confined as closely as the scope of our definition to the consideration of industrial phenomena; the objection to this definition being not as to the scope covered by it, but to its being founded upon a co-incident, and upon its ignoring the active cause to which exchange is only a means.

This same fatal criticism of being founded on a co-incident applies of course to the consideration of Economics as the science concerned with exchange value in all its relations, and covering in its scope the destruction and transfer without equivalent of exchange value as well as its creation. But if transfer by gift, theft, or inheritance, and consumption are really economic phenomena, those who hold to this definition of the science are entitled to the objection to our definition which we have been considering, that it identifies industrial with economic phenomena. To make the objection destructive, however, it will devolve upon them to show that the general laws governing industrial phenomena are also the general laws regulating gifts, thefts, inheritance, and consumption, and how the universally recognised distinction between individualistic, economic, and social phenomena can be preserved if manifestly individualistic actions are injected into the scope of Economics.

For one regarding Economics as the Science of Value—in the wider sense of the term—it is open to make the claim that the scope of Economics includes phenomena that are not industrial. Making it, however, involves the assertion that Economics as a science is concerned with a certain way (and really the only way) of determining all human actions, individualistic and social as well as industrial, and even indeed every conscious thought and volition—as every directed thought, volition, or action is necessarily purposeful, and purpose cannot be determined upon except as the result of a balancing of *pros* and *cons*, that is, as the result of valuing. This definition therefore, when rightly comprehended, would make Economics the Science of Motive in general, which it certainly is not. Neither can the conclusion be avoided by claiming that Economics is concerned only with the motives leading us to economise our efforts. That is a mere verbal jugglery, as every purposeful action is performed in obedience to a judgment of precisely this kind, as is readily perceived when we recognise that every thought, emotion, and action is purposeful exactly as it intelligently follows the line of least resistance. It will hardly be necessary to point out to those familiar with economic literature, that it is permeated with

misconceptions, arising from treating Economics as concerned at the same time with the whole of human activity and yet with only a part of it. Not only are such terms as wealth, capital, and labour, applicable to every kind of human activity, assumed to be exclusively economic terms, but theories, such as the Austrian Theory of Value (really a general law governing all human motives), are treated as purely economic, without a thought of their wider application. And the recasting of such theories and terms will of course be distasteful, and may unconsciously incline some to reject our definition.

Others, rightly so far as the fact itself is concerned, will object that many individualistic and social actions which our definition excludes from the body of the science have an economic aspect. But economic, or if you please industrial, actions have also individualistic and social aspects. According to this view of the matter, I have mistaken the general class of which economic phenomena are a sub-class, and human activities are not divisible into individualistic, social, and economic or industrial actions, but every activity is individualistic, social, or economic according to the aspect or point of view from which we regard it. But when we come to analyze any one of these three kinds

of aspects, we find a radical difference in the members of each group. The economic aspect of individualistic and social actions differs in kind from the economic aspect of industrial actions. The primary purpose of every industrial action is economic, whereas the primary purpose of every individualistic action is individualistic, and the primary purpose of every social action is social. In supplying his personal needs every one creates a force that can be, and usually is, applied in economic production, and the efficiency of that force is also largely dependent upon the social organisation. Efficiency in industry is not often the primary purpose of either individualistic or social actions, and, if it were so, it is one thing to create efficiency in production, and quite another thing to exercise it. Manifestly it is the exercise of this efficiency, or in other words industrial action alone, which is primarily economic; while the creation of economic efficiency is only one of the means by which individuals and society accomplish their individualistic and social ends. The laws and tendencies, governing the creation of the power to produce, are evidently in a wholly different class from the laws and tendencies governing the methods of exercising the power when acquired, and nothing could be more unscientific than their

inclusion on the same basis in one science, for the very object of dividing the field of our knowledge into separate sciences, is to bring those things, subject to similar tendencies, into one group. All the sciences are indeed related, but the facts and results of each are merely the data of the others. To include all the data of each science in our definition of its scope would be to make every science universal, and to obliterate all distinctions between them. We surely have the right to distinguish economic from other human actions, and if so human activities must be the general class of which economic activities are a sub-class. Because economic activities are affected by other activities is no more a reason for considering these other activities economic than for considering physical laws economic, because they also influence economic actions. Individualistic and social phenomena as well as the powers of nature, are merely the environment of economic activities, and this is fully recognised in our definition.

Of course, no disparagement of them is intended in insisting that individualistic and social actions should be excluded from the body or scope of Economics, and their results accepted only as data, for the reliability of which the Sciences of Individualism and Sociology are accountable. What Economics is respon-

sible for, as to Individualistic and Social results, is not the results themselves, but only their relation to purely economic phenomena. Thus how any particular gain in industrial efficiency affects the productive process comes within the province of the science, as does also any gain in efficiency due to the distribution of the product—due that is to industrial causes; but how any gain in efficiency due to individualistic or social causes is brought about is a matter, not for Economics to determine, but for the decision of Individualism and Sociology; whereas, how changes in distribution arise is wholly a matter of Economics. And surely there is no way of discriminating between the three sciences, if this principle is disregarded.

Utility is of course the ultimate personal purpose of all human activity, and it is the direct objective also of individualistic and social actions, but in economic activity the immediate purpose is not utility, but the abstract command over utilities produced by others, and obtainable by the production, or possession, of utilities desired by others. But what we have the right to ask of Economics is not the mere statement of this self-evident fact, but the process by which this general command over utilities can be acquired. As we have seen already, this is a question of method, and investi-

gation makes it evident that there is only one method by which it can be accomplished, namely that of the combined activity of different individuals under the stimulus of a division of the purchasing power created, pre-arranged in accordance with the productive function or functions exercised by each. It is in the study of this method, the only one by which purchasing power can be created, that Economics finds its scope, and it is in terms of this method therefore that the science must be defined. Though this is the only method by which purchasing power can be created, it is not the only method by which purchasing power can be acquired. The transference of purchasing power by gift or theft is surely not an economic action, and yet it must be so considered if Economics is defined as the Science of the Power to Purchase, as gift or theft transfer the power. So if we are to preserve any distinction at all between individualistic and social actions, and economic activities, the actions of the consumer must be regarded as individualistic, but in a Science of Value or of Exchange Value, the destruction of purchasing power has as good a claim to a place, as the creation of purchasing power. Again, consumable goods, and even some kinds of "fixed capital" which have passed out of the scope of Economics into

the hands of the final consumer, or into possession of the state, have not, so long as they remain in existence, lost their power to purchase, which is only in abeyance, being subject to a change of intention on the part of their possessors; but if Economics is concerned with the power to purchase in all of its aspects, they should not be excluded from its scope even during the interval in which such things are retained for use or consumption and are not for sale. To utilise "exchange value" or "value" as the basic idea of our definition of the science, we must therefore limit it to the creation of exchange value, which is practically to identify its scope with that of our definition, which makes Economics the study of the only method by which exchange value is created. But though the scope of the two definitions is the same, the difference between them is vital, as has already been shown.

To anyone valuing the acquisition of knowledge more than its orderly arrangement, the point just made may appear hypercritical. They will regard it as of minor importance, so long as Economics has to consider individual and social as well as industrial facts, whether the science is to be so defined as to include the exploitations of all these classes as equally primary, or so defined and construed as to confine its

primary investigation to industrial facts alone, only taking individualistic and social phenomena into consideration as data. Economists, however, are perhaps the class of thinkers least likely to subscribe to this somewhat bourgeois view, as they of all men recognise that facts are of little or no scientific value until placed in their proper relations. On the other hand they will naturally shrink from the labour involved in the reorganisation of theories demanded by my definition of the science, if it is accepted. This definition practically confines the science to the study of industrial laws and conditions, and considers social and individualistic conditions and activities only as they react on collective industry.

A very casual glance over the historical development of Economics makes it evident enough that economists have, to a considerable extent, neglected the distinction I have tried to draw between the primary phenomena and the data of our science. Take, for instance, the time-honoured division of the subject into laws of production, laws of distribution, and laws of consumption. It would be hard to find a class of human action more purely individualistic than those of consumption. It has, however, two economic bearings upon industry, in that it is the efficient cause of the power to labour,

and in that the character of the demand for consumption has a potent influence upon the character of industry, the kind and amount of products industry will furnish. But these economic influences of consumption are only the effect of the laws governing consumption, and not the laws themselves. The Science of Economics, therefore, cannot include the laws of consumption, but is confined to utilising the results of those laws as data. The truth of this is somewhat curiously illustrated by the unconscious habit of economists of neglecting, almost entirely, to give any consideration at all to the investigation of laws of consumption, despite the prominence given those laws in their formal statements of the scope of the science.

Again, if we consider the laws of production, many of them are physical, and as Economics is a moral science, a science, that is, confined to the consideration of motives and their effect, it cannot include physical laws except as data. It is only those laws of production that are corollaries of the manner of distribution that come within the scope of Economics, because the expected distribution of the product is the motive which leads to production. Production and distribution are not separate provinces of the science, whose full scope is covered by pro-

duction as affected by distribution, and distribution as affected by production. This complementary relation of production and distribution has been noticed and commented upon by several economists, but no one, to my knowledge, has recognised that consumption is primarily individualistic.

The treatment of economic theory as concerned with a certain aspect of things, instead of as concerned with a certain sharply defined class of things, is largely responsible for a good deal of ambiguity both in economic concepts and the use of economic terms. Hardly any two economists agree exactly in their concept of such fundamental things as wealth, capital, and land—and hardly any writer is consistent with himself in the use of any of these terms. Take, for instance, the term "capital," used in its economic sense; everyone will tell you glibly enough that it is wealth employed in production. But what is meant by this reply? Every one is familiar with the old controversy about the distinction between productive and unproductive labour, and productive and unproductive capital, and that hardly any two disputants drew identically the same line of distinction between them. The discussion finally lapsed into innocuous desuetude, but it has never been settled. Is wealth, in the hands of

the final consumer, capital? Are bank notes capital? Is a park or a gas-plant, owned by the city, capital? Is the capital of a nation greater, less than, or equal to the aggregate capital of the individuals composing the nation? Is the physical power of the labourer, or the mental ability of the educated man, capital? Is an idle factory capital? And if not, how long must it remain idle and unproductive to cease being capital? Or is it capital from seven in the morning until noon, and from one until six, and not capital the rest of the time? A child can ask questions which a wise man cannot solve, but any one possessed of a precise capital concept should be able to answer offhand these questions, and a hundred more like them—but surely the number is somewhat limited of those who would exactly agree in their replies to all these queries. Have we not been led into this labyrinth by the conception of Economics as concerned with a more or less vague aspect of things, rather than with a clearly defined class of things? In the first place there is a certain vagueness inherent in aspects. They vary in degree, that is, some things have much more of the aspect than others. When we attempt to bind together under the same general laws actions primarily economic, but capable of producing secondarily individualistic and social

effects, and actions primarily individualistic and social, but capable of producing retroactive economic effects, the resulting science will not be pure Economics. Individual activities, social activities, and industrial activities are indeed all subject to certain laws, but these are the laws governing the wider field of human activities in general. It is the body of laws peculiar to each class of activities that forms the theory of that particular kind of activity, and the moment we seek to extend the dominion of the laws of one class over the activities of another class, or to confine the application of general laws to one species of a class, uncertainties and misconceptions arise. If Economics is the science of a certain aspect of activities, the present conception of capital as a purely economic term is correct. When, however, we define the science as here advocated, we perceive that this term has a wider extent, and that it is not a purely economic term, that is, that there is individualistic and social as well as economic capital. When it is clearly recognised that capital is capable of individualistic and social as well as economic employment, and when it is further apprehended that it is only a subsidiary productive factor, a productive factor, that is, in a different and inferior sense to that of enterprise, all

these ambiguities are readily resolvable. The concept of capital will be alike to all who recognise the validity of the definition of Economics here advanced, with its corollary concerning the function of the entrepreneur. And the same is true, as will be shown later, of the concepts of "land" and "labour," which are definitely settled by our definition, with the result of exposing the inadequacy of the present concepts of these important terms. Land, capital, and labour are only productive factors in the sense of being the means by which those who assume the direction and responsibility of industry carry on production. The entrepreneur or enterpriser is the only real productive factor. Pure rent, pure interest, and pure wages are what the enterpriser has to pay to obtain the privilege of controlling and utilising these three means. Whatever the individual enterpriser pays over these amounts is paid to individual landlords, capitalists, and labourers, not as landlords, capitalists, and labourers, but as enterprisers and as sharers with him of the responsibilities involved.

One of those who criticised the Risk Theory of Profit advanced the objection that it founded the Science of Economics entirely upon functions. This is perfectly true, not only of this theory, but also of the definition

of the science here proposed. He said that undoubtedly a science could be constructed upon this basis, but that he saw no promise of any sufficient gain resulting from so great a departure from the common and accepted usage of economists. This criticism instead of being an objection, as intended, seemed to the writer the strongest kind of an endorsement of his views. Though they have not been equally consistent in their use of the terms, economists have universally based their formal distinctions between the three productive factors, land, capital, and labour, upon function and function alone. Unless the distinguishing mark of the fourth factor, "enterprise," is also founded upon function, what other co-basic idea can exist? All economic activity has of course the same ultimate motive, namely, "weal" or well-being, but the sub-motives governing individuals will of course vary with their opportunities. The owner of capital will naturally act differently from the owner of land, and from the owner of mental or physical power, and from the employer of land, capital, and labour. Each will be governed by the character of the function peculiar to the productive force he controls. And if any individual controls two or more of the productive factors, his controlling motive will be correspondingly complex.

Surely it is the combination and interplay of the four productive forces with their diverse functions, when they are differentiated by being exercised by different individuals, which is the only possible subject-matter of Economics. Of course certain forms of expression lend themselves to the corroboration of this assertion of my critic, such, to go no further, as the definition of Economics as the science of wealth—a material thing,—or of value, which is not a human action at all but a relation between things; or the use of the terms land, labour, and capital as productive, whereas it is the use of land, the use of labour, and the use of capital, by the entrepreneur as means, that can only be possibly so denominated. But however loosely economists have expressed themselves, it remains true that all that has been definitely accomplished has resulted from the study of functions, although this has not always been distinctly stated or recognised.

There will naturally be a good deal of objection to the conception of such terms as wealth, capital, land, labour, and even enterprise being extended beyond the bounds of Economics. This is however made necessary by our definition of Economics, and I hope in succeeding chapters to make it evident that such confusion and ambiguity in the common use of these terms

as still remains is dissipated when they are given the wider application here claimed for them. It is to be noted in favour of the definition here asserted for Economics, that the subject of inquiry, remaining within the scope defined, includes all matters of practical interest, and will afford all the knowledge applicable to the affairs of industrial life. The inquiries excluded from its special domain are really academic to economists, and consist of the wider generalisations inclusive of individual and social as well as economic phenomena. These wider generalisations, instead of being disparaged by their exclusion, are really elevated to a higher plane, and must become both clearer and more useful, when recognised in their wider relations. Our analysis has, I think, shown beyond question that industrial activities differ so radically from all other activities as to demand a separate consideration, which they have hardly received, because they have been regarded as only a loosely conceived subgroup of economic activities.

It is also to be noted in favour of our definition of Economics that it is the only one founded on a principle applicable as well to the definition of Individualism and Sociology, and the only one ever proposed which affords a means of clearly distinguishing these

three classes of human activity from each other. That the unconscious cerebration of the race has invariably recognised this threefold division of human actions surely affords a test, to which scientific classification must conform at its peril, and that the proposed definition for the first time enables us to classify accurately all volitional human actions seems to be almost a guarantee of its validity.

CHAPTER V

THE INTENDED LINE OF ARGUMENT

RELYING upon our major premise, that Economics is the study of that class of human activities in which there is a combination of different individuals, actuated by definite and pre-arranged personal incentives, we will come naturally to the separation of our general class into sub-classes distinguished from each other by the functions performed, which four functions constitute the minor premises of our argument; that is we must subdivide economic actions, in accordance with the employment of the four recognised means by which any individual, acting in concert with other individuals, can command a pre-arranged share of the purchasing power inherent in the resulting product. These means, or functions, are indeed in a sense discovered by observation, but by observation or induction both limited and guided by intuitive perceptions of what the nature and character of our general class requires them to

be, which aid to observation is not properly available until the science itself is positively defined. These functions are by no means peculiar to economic activity. On the contrary, as we have seen, they are just as essential to individualistic and social, but it is only in economic activity that the exercise of these functions is distributed among the individuals, combining their efforts in production, so as to differentiate them as to incentives afforded. The individual acting alone exercises all the functions brought into action, but does not, and indeed cannot, apportion the product among them. Individuals combined for social purposes may each exercise a distinct function, but there is no proportionate distribution of the resulting product by which the reward of the contribution of each is measurable. Consequently, as in individualistic production, there can be no differentiation in the incentives leading to the exercise of different functions. When the state hires labour, rents land, and borrows capital the labourers, landlords, and capitalists do differentiate in the functions they exercise, and consequently their action is economic. They however are not the real contributors to a social result, which the taxpayers are, as they supply the purchasing power expended by the state in wages, interest, and

rent. There is no distribution of purchasing power created but only a distribution of purchasing power contributed by others. In all such cases the reward of enterprise, the function assumed by the state, is impersonal, wholly unsusceptible of precise distribution, and is not therefore differentiated as a personal motive in the sense in which the term is here employed.

How the industrial action of individuals is affected by any complexity of motive due to their income being composite, is an interesting but subtle question into which we cannot enter here. As a rule individuals will be governed in their economic activities by their predominant interest, and that they will be so governed has to be assumed in any theoretical discussion. The subordinate interest has however to be taken into account as a modifying influence in any application of theory to practical matters, whenever it is not so insignificant as to be negligible. This, however, is a necessity of particular cases and subordinate subjects, rather than in the discussion of fundamental principles in which the individual is regarded simply as the exerciser of a single function. All we have a right to expect from the Science of Economics is the discovery of the tendencies attributable to the different functions. The resultant of these tendencies, when they are

complex and do not pull in the same direction, is a matter for the statistician rather than the economist, whenever any considerable degree of exactitude is required. But while this is essential to a quantitative result, the general direction of the more or less divergent tendencies in action is usually evident enough without a quantitative analysis. And it is only when the tendencies themselves are comprehended that we are ordinarily in a position to apply quantitative analysis with much expectation of valuable results.

As this is very far from being a general treatise on Economics I do not feel myself under any necessity of attempting a full exposition of any of my headings. The purpose here is supplementary, and it will therefore suffice with a few exceptions to take for granted the reader's general acquaintance with the present state of the Science, and to avoid so far as possible any restatement of accepted definitions and theories. Attention henceforth will be given, as exclusively as possible, to some modifications of accepted definitions and theories, that have occurred to the writer as necessitated by his Definition of the Science, his Theory of Profit, and the Principles of Classification he has called attention to. Of course this examination of economic theory will be far from exhaustive or final, but

will perhaps serve as an example, however imperfect, of the kind of investigation the acceptance of the author's theories will naturally develop.

As a landscape changes accordingly as it is looked at from different eminences, there is always one point of view pre-eminently fitted for acquiring an idea of its general characteristics and strategic possibilities. For a particular section of country, this point would naturally be the highest and most central eminence. It seems to the writer that the function of Enterprise affords the point of view from which the general features of the field covered by Economics can be most clearly apprehended, and that there is a strong presumption against any conflicting views obtained from other and less commanding points. This presumption indeed becomes a certainty when it is recognised that Economics is a moral science, which is to say that it is a science wholly concerned with volitions, and necessarily therefore founded upon motive. And as profit, in the wide sense of the term, is the only possible determinant of volition, Enterprise is the source of all economic activity, as well as of all individualistic and social activities. The direction and character of a volitional activity depends primarily upon its motive, and only incidentally and secondarily upon the en-

vironment. The environment therefore must be regarded, not as an original, but only as a disturbing cause, or rather as a condition; and we must first duly appreciate the original cause before we can consider how the environment and disturbing influences will modify results. That every human activity has its rise in the expectation of a net gain uncertain in its amount is especially important to Economics, because in economic action alone the function of enterprise is assumed by a distinct class of individuals, and thus especially differentiated from the other productive functions. Unfortunately for the science, however, the theory of profit, really the controlling theory to which the theories of rent, interest, and wages must all conform, has been the last theory to be developed, and indeed is not yet developed if this attempt be adjudged a failure. But however this may be, it is not open to question that all theories concerning land, capital, and labour, and rent, interest, and wages, must be submitted for their final verification to the true theory of enterprise and profit, when that shall have been obtained. The contrary is of course true, but with a difference. A cause must agree with its effects as well as an effect with its cause, and that cannot be a true theory of profit which does not agree with, explain, and verify the true

theories of rent, interest, and wages. The point raised here is that profits are the cause of rent, interest, and wages and that rent, interest, and wages are not the causes but only the conditions of profit, and that therefore we cannot have verified theories of them, until we have an undisputed theory of profit with which they are in agreement. The employer pays wages, rent, and interest for the purpose of obtaining a profit, but labourers, landlords, and capitalists cannot pay the employer a profit for the purpose of obtaining rent, interest, and wages, because they do not pay anything to him. In other words they look to him for their remuneration, while he does not look to them, but to the final consumer, for his. Logically therefore what determines their remuneration must be found in the uses the employer has for them—whereas what determines profit is not the use landlords, capitalists, and labourers have for the entrepreneur, but what use the consumer has for him. The demand for consumption comes of course from landlords, capitalists, and labourers as well as from enterprisers, but it does not come from them as such, but as individuals. Land, capital, and labour are the servants of enterprise, but enterprise in its turn is the servant of the whole community. While, therefore, enterprise is dominant over the other productive

factors, using them as means for the attainment of its own purpose, it, in its turn, is subservient to the whole community, and dependent upon the demand exerted by consumers as a body for the realisation of its expectations. Only such profits are realisable as the demand for consumption allows. The amount of enterprisers' risk varies of course with the amount of the ownership they are obliged to assume. When that amount is increased by the refusal of consumers to buy their products, prices fall and profits are lessened. When their incentive to production is lessened enterprisers of course produce less, and as established standards of life make it difficult for consumers to restrict consumption to the extent in which production has declined, the equilibrium between production and consumption is finally restored. The point essential to my argument is this—that the remuneration of enterprisers depends, both primarily and ultimately, upon their relation to the community as a whole, while the remuneration of landlords, capitalists, and labourers depends primarily upon their relations to enterprise—upon what their employer finds it to his advantage to pay them. Ultimately of course what he can pay them depends upon his relation to his employer —the community—but evidently we cannot unravel their relations, if we insist upon putting the

four productive factors on the same level and considering them all as mutually employing each other or as directly employed by the community, which seem to be the prevalent ideas. My claim of dominance for enterprise does not mean, as the Mercantilists and Physiocrats apparently assume, that industrial society exists for the benefit of enterprisers alone. It is of course the total annual product, and not the portion of the product which can be regarded as a surplus, however the term surplus may be defined, which is the ultimate and proper aim of productive endeavour. Neither because he acts under the direction of another is the furnisher of any one of the means of production less necessary than, or inferior to, the one who merely assumes the responsibility. They are all alike members of the community, each worthy of his just proportion of the total product and no more—a division which would be assured if frictionless competition were possible; a competition, however, not of class with class, but between the individual members of each class. The equal standing of the four productive factors in this sense must not be allowed to obscure, as it has in the past, the immense scientific importance of the fact that the community as a whole, although equally the master of all, deals directly with only one of the four productive factors, and that the relation, direct

and indirect, of the four factors with each other and with the community cannot be understood when this fact is ignored or neglected as it certainly has been in the past and is yet. While it is absolutely essential to the continuance of industrial activity that the normal rate of profit should be readily obtainable by the marginal enterpriser, the interest of the community lies—not only as to the total amount produced, but also as to its distribution—in the normal rate of profit itself being low and the average rate not too much above the normal.

As I hope to show later, the theory of profit here advocated sheds some light upon, and leads to some considerable amendment of, the common concepts of land, capital, and labour, and of the accepted theories of rent, interest, and wages, which all fail somewhat in verification when submitted to this test. The view of the economic phenomena which I obtain from this standpoint of the enterpriser, a standpoint heretofore inaccessible, should of course be more accurate and comprehensive than those heretofore held, and if it fails in these particulars, I cannot but think it the fault of the camera, rather than of the point of view selected.

A very good friend who is also a distinguished economist objects to my adoption of Enterprise as the point of view, saying that agriculture is

the proper viewpoint because it is the great industry of mankind. I cannot but think him wrong in this and that the underlying idea involved in his assertion is in direct contradiction to the true method of scientific investigation. Certainly the chemist who wishes to analyse a mineral does not look around for a mountain of it, but for the purest specimen he can find. And if he finds the mountain, all he does is to chip off the best small piece he sees to carry home to his laboratory. The first thing he does then is to free it as far as possible from all impurities before subjecting it to one chemical reaction after another. We cannot treat an economic phenomenon in quite this way, especially as to the latter or experimental part of the chemist's process, but we can in a measure imitate him in the former, or process of isolation. In other words, when we seek examples which will disclose to us the nature of an economic function, what we should look for is one in which, so far as possible, the function is differentiated or isolated. The farmer is manifestly least of all men suited for such a purpose because he exercises so many of the industrial functions conjointly. He is always enterpriser, labourer, and capitalist, and often owns the land he tills. To discriminate these functions we should select some such example as a railroad built on the proceeds of its

bonds. Here the bondholders are the capitalists, though as they also assume some risk they are also enterprisers, and such part of their income, less any final loss, that is in excess of pure interest on their investment, is profit. The shareholders however are enterprisers pure and simple, and anything they get for their shares or in dividends is pure profit and any loss they have finally to make good to the bondholders or creditors of the road is a pure loss. The promoter of the company in the first place, and after him the president and directors, are the co-ordinators or captains of industry or mental labourers, while the conductors, brakemen, etc., supply the element of physical labour, and the owners of any franchises enjoyed and of such lands or buildings as they occupy are landlords. This example really teaches us something, whereas the example of the farmer owning his farm, despite there being so many of them, helps us not at all to discriminate between the industrial functions.

The line of argument herein presented may be summarised as follows:

First, that the method of the Moral Sciences is properly deductive because they are concerned with volitional causes. What they have to determine is not what is the cause of a given effect, but what will be the effect of a given cause.

Second, that the definitions of a Moral Sci-

ence can be positively obtained only by a deductive process, applied in strict accordance with recognised principles of classification, or in other words by the application to fundamentals of what is generally spoken of as the "orthodox method."

Third, that Economics is concerned with a distinct class of volitional activities, and that the popularly accepted division of volitional activities into individualistic, social, and economic is well founded; and that the principle of division between them is to be found in methods adopted and not in means employed or ends sought; and that the method of attaining ends by combinations among individuals, each exercising one or more of the productive functions under the stimulus of a definitely prearranged division of the purchasing power created, is the distinguishing mark of economic endeavour.

Fourth, that Enterprise, the predominant productive factor, or in one sense the only productive factor, the others being means employed in rather than causes of production, is the only proper standpoint, as being their real source, from which economic phenomena can be studied; and that the orderly arrangement of economic theories must be founded upon the Theory of Enterprise as their basis—and this

despite the fact that the community is best served when both the normal and average rates of profit are reduced to the lowest point that will insure the full exercise of the productive functions.

Fifth, such modifications of the prevailing conceptions of the three subordinate factors as are necessitated by the recognition of the principle that their subordination to Enterprise forces us to distinguish between them by the peculiarity of each in their relation to Enterprise.

Sixth, the statement of some corollaries, more or less divergent from the present views of economists, which necessarily follow from the above principles, in conjunction with certain observed facts of the economic environment, to which attention will be called as the occasion arises.

This presentation of my argument is unfortunate in this respect, that it brings into prominence and emphasises, perhaps unduly, the points in which I disagree with the prevailing conceptions of economic theory, whereas my sincere desire is not at all to disparage accepted theories, but only to add my mite to them by developing the general theory of the science a little further along lines of thought confessedly unpursued, and applicable to problems confess-

edly unsolved. No one is infallible and I may be wrong in some of my conclusions, but it seems to me at least that my attempt is along the natural lines of development, and in accordance with orthodox methods.

I venture to hope that the reader of general culture will be able to follow this line of argument as well as the professional economist. Some of it may not be "easy reading," due partly to the subject itself, and partly to my presentation of it; but the difficulties encountered will not be technical, or due, as has hitherto necessarily been the case in other economic treatises, to ambiguity in the meaning of fundamental terms. The reader is not asked to accept my content of these terms because they are the final result of my careful and critical observation. He is not asked to look at the phenomena through my eyes or through any one's else eyes but his own. The logical process by which the fundamental concepts here arrived at have been attained, being deductive, is as inevitable to one mind as to another, provided such of the premises as have been obtained by observation and induction are accepted and understood. The inductive premises employed, at least those used for our fundamental conceptions, are not the result of my observation which I ask the reader to accept, but of the general

observations of the race, and have been and are accepted generally and without dissent. Consequently I make no appeal to the personal authority of any one, however distinguished as a thinker and economist he may be. And no knowledge of economic literature, or of technical terms, is essential to the understanding of the argument though of course such knowledge will ease the reader's way and give him quicker comprehension. The few inductive premises I have utilised being accepted, the results obtained are positive, and as positive results are always comprehensible to any one who will go to the trouble of fully understanding them, they are never so incomprehensible, or so suggestive of doubt and hesitancy or confusion of mind, as hypothetical results, however great their probability is. Whatever else they are, the fundamental conceptions to which our train of reasoning leads us are at least clear cut and free from ambiguity. And as it is just the lack of this quality in prevalent conceptions which has repelled and distracted general readers, the author is not without hope that this treatise may attract some interest and attention from them, as well as from economists.

CHAPTER VI

ENTERPRISE

TO such of my readers as I am known at all, I am probably best known as the promulgator of the "Risk Theory of Profit." This theory asserts that the profit of an undertaking, or the residue of the product after the claims of land, capital, and labour (furnished by others or by the undertaker himself) are satisfied, is not the reward of management or co-ordination, but of the risks and responsibilities that the undertaker (usually spoken of as the Entrepreneur, but whom I prefer to designate as the Enterpriser) subjects himself to. And as no one, as a matter of business, subjects himself to risk for what he believes the actuarial value of the risk amounts to—in the calculation of which he is on the average correct—a net income accrues to Enterprise, as a whole, equal to the difference between the gains derived from undertakings, and the actual losses incurred in them. This net income, being manifestly an unpredetermined residue, must be a profit,

and as there cannot be two unpredetermined residues in the same undertaking, profit is identified with the reward for the assumption of responsibility, especially, though not exclusively, that involved in ownership.

While it has been freely admitted that, in advancing this theory, I pointed out a form of income radically distinct from either rent, interest, or wages, and while no one has ever denied that it is an unpredetermined residue, which is the accepted meaning of the word "profit," there has been, and perhaps is yet, some hesitation in attributing this special kind of income to the Entrepreneur by those who persist in considering him solely as the co-ordinator of land, capital, and labour. This contention will be considered later more at length, and to better advantage. It is enough to remark here that the Entrepreneur, being the one who is co-ordinated for, cannot be the co-ordinator in his own capacity, though, of course, he can and does co-ordinate for himself as an individual, as well as engages agents to co-ordinate for him.

It is, of course, true that the out-turn, of responsibilities assumed, depends upon the wisdom and good fortune with which they are selected, and what my opponents apparently contend for is that profit must be considered

as the result and reward of prescience and good fortune, and not of the actual assumption of responsibility. They regard the subjection to responsibility as an incident of management, while my theory regards management as incidental to the assumption of responsibility. They seem to forget two things. A man could accurately divine the future course of the market for wheat or cotton, but if he neglected to operate he would neither make a profit nor suffer a loss. If they insist that management and assumption are inseparable they have no right to attribute profit to management and deny it to assumption. If, on the other hand, they recognise a distinction in thought between the two terms—and surely there is such a distinction—we can indeed attribute profit to either of them, but in different senses. We can truly say that profit or loss inevitably results from subjecting ourselves to risks and responsibilities, and this assertion remains true whether the subjection was intended or unintended, whether the risk was managed or not. On the other hand, it is not quite accurate to say that profit is the result of wise selection or management. There is an ellipsis here. What is meant is that profit is the result of risks wisely selected. We cannot indeed assume responsibilities without first determining for

ourselves, or having others determine for us, what responsibilities are to be assumed. But it is only when intention is carried out that practical results follow. It is the action and not the decision to act which is the effective cause of the result. It is the subjection to risk which is the efficient cause of the results of subjection. The question between the two terms is really settled when we remember that management can be delegated to another, to whom a wage or a salary is paid, but we cannot transfer risk without transferring also the liability to gain or lose by it. When we say that profit is the reward of ability in the exercise of our mental powers, we mean exactly what could be said of physical labour, if we should affirm that wages are the reward of the intelligent direction of our physical efforts. For it is evident that what an employer will pay for is only such physical efforts as accomplish what he wants done. Wages depend then wholly on labour being so directed. We can therefore say that wages are the result of the wisdom shown in management. And if the first assertion does not stand in the way of our regarding wages as the reward of labour, the second cannot stand in the way of our regarding profit as the reward for subjecting ourselves to risk or responsibility.

The second thing they overlook is that co-ordination, whether we regard it as managing, selecting, or planning, is an act of mental labour, as is shown more fully elsewhere, and if profit is its reward, profits are either a kind of wages, or labour earns two entirely distinct kinds of reward.

Others profess a difficulty in accepting the Risk Theory of Profit because, as it is capital which is risked, they assume that any loss which he suffers must fall upon the enterpriser as a capitalist. These forget that it is a physical impossibility for any one but its actual possessor to risk capital, and that it is the entrepreneur, and not the capitalist, who is in actual possession of all "capital goods." That the capitalist at the time he made his loan was able to exact an insurance against the risk to which the borrower might subject his capital was due to the fact that at that time he was its actual possessor, or in other words as an individual he was then both capitalist and enterpriser. The moment his capital is loaned he parts with the ownership and its attendant risks and responsibilities.

Others have objected that, as risks could in some instances be insured against, risk was rewarded by the premium paid and was therefore a predetermined cost and not an unpre-

determined residue; the answer to which is, of course, that the reward of an insurer is not the premium he receives, but the difference between that premium and the loss he eventually suffers. Insurance is a cost to the individual enterpriser who insures. To the extent in which he insures, he restricts his exercise of his function, but the risk is merely transferred to the insurer, who becomes himself an enterpriser and the recipient of an unpredetermined residue by accepting it. Moreover, no entrepreneur can rid himself of all his risks without wholly abdicating his special function in production. The greatest responsibility he assumes, that of the value of his property fluctuating, he cannot indeed wholly insure against, but can only end it by parting with the thing owned, and when its sale is effected, what was an unpredetermined residue becomes a realised gain or loss, determined in amount, and the previous owner has ceased to exercise the function of the entrepreneur.

Moreover, the objectors to the Risk Theory of Profit subject themselves to the necessity of explaining how the four productive factors can obtain five fundamentally different kinds of income. They are barred from affirming that one of the factors can enjoy two kinds of income. An individual can indeed obtain all

four kinds, but that is because he can, and sometimes does, exercise all the productive functions. But if the productive factors are distinguished only by the nature of their functions, as is the case, it involves a contradiction of terms to suppose that any one of them can obtain two or more fundamentally different incomes, because the difference between such incomes is dependent upon the character of the functions to which they accrue.

As has already been indicated, Enterprise stands on a different footing from, and above, the other productive factors. In the proper sense of the term, it alone is productive, the other three being simply forces set in motion, or released forces—the means by which it creates value. The question naturally arises as to whether they should not be considered conditions of, rather than factors in, the productive process. The answer seems to be that they should be treated wholly as means rather than causes were it not that an act of volition is always involved both in their creation and activity. While the enterpriser is the only direct creator of purchasing power, the landlord, capitalist, and labourer are each voluntary creators of a condition essential to his activity. Appropriation, saving, and the acquisition of physical or mental force are

voluntary acts with an ultimate purpose of betterment, or the acquisition of "weal." They are not, to be sure, economic actions because they are individualistic in the first instance, but an element of individualistic responsibility and risk and therefore of enterprise is involved in each of them. More than this, it is just this element of individualistic enterprise which makes them creative. The volition involved brings them within the field of the Moral Sciences, but only within the field of Economics when the result of the separate volitions is permitted by their owners to be utilised as a basis for combined industrial activity, with a pre-arranged division of the value to be created. In other words it is their voluntary use in combination for personal purposes, and not their creation, which is strictly economic.

While, therefore, land, capital, and labour stand on a different footing from enterprise, they are, it seems to the writer, correctly considered to be subsidiary productive factors, and as economic factors when, as is usually the case, land, capital, and labour forces are employed by the enterpriser with the consent of their owners in combined production with a personal purpose. The matter, however, is of merely academic interest to my argument, as regarding them simply as means or conditions,

and enterprise as the only productive factor, would have no influence, that the writer has been able to discover, upon the development of economic theory, beyond perhaps some verbal changes. Nobody considers the owner of the spade as the one who dug the ditch. Neither would the owner of the land—the one who furnished the opportunity for digging the ditch—be so considered. We do indeed speak of the hired labourer as the digger. We also call the man who hired him the digger of the ditch, but evidently in a different sense. It is the latter only who is strictly the producer—the hired labourer, like the capitalist and landlord, only furnishing a means.

The exigencies of the discussion have led us to anticipate somewhat the exposition of enterprise and profit. It may be well however to note again that every act of volition connotes and involves enterprise. We cannot act at all, or even think, without assuming the consequences, or without foregoing the doing or thinking of something else. The act of volition involves a more or less conscious preference, a balancing of pro's and con's, a valuing; and the weal difference between what is done and what might have been done is an unpredetermined residue —a profit or a loss as the case may be—whether it can be reckoned in dollars and cents, as in

economic activity, or more indefinitely in feelings, as in individualistic and social activities.

Although it may seem superfluous after what has already been said, it may be well here again to call attention to the economic supremacy and importance of the Enterpriser. He bears very much the same relation to the industrial organism that the will does to the body. Perhaps his relation is the more supreme of the two, because the body industrial has no reflex system, by means of which it can continue exercising its functions after intelligent direction has been withdrawn. The government of the mind over the body is only partial, the involuntary and unconscious activities, so far as we know at least, not being subject to it, whereas all weal-seeking is voluntary, and consequently every human activity, with which the Moral Sciences are concerned, comes under the dominion of Enterprise. The desire for a change cannot arise in the human mind except as a corollary of a desire for betterment. The result of change is always an uncertainty, and any one effecting a change, necessarily subjects himself to the uncertainty involved, and assumes the responsibility and risk of the outcome, so far as he himself is affected directly or indirectly by it. The result is therefore an unpredetermined residue—a gain or loss as the case eventuates. Every volitional

causer of a change, whatsoever the nature of the change, is therefore an enterpriser or entrepreneur, and the result of the change, less its cost, is to him a profit.

Now of course it would be possible for us to organise our knowledge of the causes leading to human activities as a study of motive in general, and call that science Economics, and in a measure that is what has unconsciously been done in the past, and is yet done in the present to the extent that land, labour, capital, and enterprise are yet treated as exclusively economic terms. It has not been appreciated that this usage was in direct conflict with the universally accepted classification of human activities into the threefold division of individualistic, social, and economic. Unless therefore we are prepared to abandon this popularly accepted classification of human actions, we must seek out the peculiarity that separates economic from social and individualistic actions, and organise the Science of Economics about the resulting definition of economic activities as distinguished from individualistic and social.

Now as Enterprise is the initial, dynamic, and, strictly speaking, the only productive force, or factor, we will naturally expect to find the distinction sought for in the motives which lead to it. The motives leading to the acquisition of

land, or other opportunity, are affected not so much in kind as in degree by their intended individualistic, social, or economic use. And the same is true of the motives leading to the accumulation of capital and the building up of the body and the mind. Of course the desire to accumulate, acquire, or to expand our physical and mental powers is intensified according to the expected degree of reward, which differs greatly in the three different ways of acquiring weal. So long as the derived benefits are equal, every one is indifferent to the use to which the means of production he controls are put, either by himself or by others, whether such use be individualistic, social, or economic. Provided he gets the same rental the landlord is indifferent as to whether the tenant proposes to live exclusively on what his own labour on the rented farm will yield, or whether he employs other labour and sells his product, or whether the state is the occupant. The same is true of the capitalist; and the labourer, as his employer directs, will either aid him in the production of a salable product, or perform a service which is an individualistic good to his employer, or serve the state as a soldier or policeman.

When however we consider Enterprise, we find the inducements to individualistic, social, and economic undertakings different in kind

as well as in degree. This is patent enough when we contrast social with economic enterprise, or individualistic with social enterprise, but it is perhaps not so patent when individualistic and economic enterprise are to be contrasted. The actuating motives of both these two forms of activity are purely and directly personal, whereas the actuating motives of the individuals composing a society are either altruistic or only indirectly personal. The difference, however, between the individualistic and the economic motive, as they are both personal, might be incorrectly looked upon as one rather of degree than of kind. Even if this were all it would suffice some persons, perhaps, as a ground for distinction between them, as the combination of effort peculiar to the latter so greatly increases productiveness. But it is not all, as in economic activity there is a differentiation of enterprise which is a difference in kind rather than in degree. That is, in individualistic enterprise, although income has at least two sources--namely, labour and responsibility, and may have four—it is yet homogeneous in the sense that it is never separated into its component parts. What alone interests the individual producer is the total product per unit of effort, while the economic entrepreneur cares only for the amount of the residue and, provided this is un-

changed, the product per unit of effort is a matter of indifference. This difference in motive is one in kind, and not in degree, and this differentiation of enterprise persists in all economic activity, no matter to what extent the income of the individual enterpriser becomes composite through his being landlord, labourer, and capitalist, as well as employer. The fact that he has to prearrange with others about sharing the total purchasing power to be created forces upon his consideration the principles upon which the division must be made. He is always cognizant of about what is due him for each separate function he performs, which is not the case, and indeed cannot be the case, as to purely individualistic actions.

The practical importance of understanding the principles underlying the combination of efforts under the stimulus of personal interest lies in its efficiency to produce. On the one hand, it possesses the enormous advantage over individualistic effort yielded by combination and division of labour, upon which there is no present necessity of dilating; and on the other it possesses over social efforts an advantage, perhaps in most instances quite as great, due to the greater strength of personal as compared with altruistic or social motives. These advantages, although resulting in an enormous

economy of human effort—whence the name of the science,—are relative. The numerous services, most of them but petty, which we find it less trouble to perform for ourselves; the capital in the shape of consumable goods we find it handy to keep within sudden call; the larger amount of "fixed capital" such as dwellings and household furniture owned by the users and devoted to the performance of services, are, on the one hand, exceptions to the general rule of the greater productiveness of economic effort over individualistic. And, on the other hand, the maintenance of law and order, the national defense, and other social needs, are exceptions to the superiority in strength of the economic over the social motive. For some of these ends the economic process is wholly inapplicable, because the product is not salable, and about these there is no question. They are necessarily social. Others, the product of which is salable, are properly delegated to society, when the amount of product per unit of effort, or its quality,—matters of indifference to the economic entrepreneur,—are of great social importance. Under this heading can be placed education so far as its purpose is social, and the postal system, the latter chiefly because the private entrepreneur would not willingly do at a loss that part of the business which is educa-

tive, or socially advantageous, such as the carriage of printed matter below the cost of the service, a uniform rate for all distances, and rural delivery.

How far social should be substituted for economic control in the production of public utilities, and the exploitation of natural monopolies, is at present a burning question, into which we cannot enter here, further than to point out that no gain in the amount of purchasing power created can possibly result. The utmost that can be hoped for is that it will be as great, and in that case the only direct economic gain to the community is not in income, but in a more even distribution. Disputants seem to forget that the receivers of profits and monopoly gains are members of the community. Municipal ownership of public utilities that merely distributes these profits and gains in lower prices to the consumer, and higher wages to the employee, adds nothing to the aggregate income of the community. And the advocates of municipal ownership will hardly win their case, unless they recognise more clearly than they do now that it can never be expected that the social incentive to combined activity will be as effective as the personal, and that some loss of economic income must always follow the change. The

question to be decided for each individual case must always be whether a smaller aggregate of income more equally distributed is better or worse than a larger aggregate more unequally distributed, and whether the loss in exchangeable things is overbalanced by social considerations, that is by gains in results that have no purchasing power. There is of course a very considerable social gain of this character in equalising distribution in that the marginal utility of a large income is less than the marginal utility of a smaller income, from which it results that the expenditure of an income of $50,000 a year by one individual would yield a much smaller aggregate of satisfaction than the expenditure of $5000 each by ten individuals. Thus if we suppose the expenditure of the first $5000 to yield ten units of satisfaction, and that of each successive $5000 to decrease by one unit, the expenditure of the whole sum by one individual would yield 55 units of satisfaction against 100 units of satisfaction yielded by the expenditure of the same sum by ten persons. Another element modifying this result must not, however, be overlooked. Just as there would be no advantage to the human body in diverting blood from the brain to some other part that receives only one tenth as much blood as the brain, so there would result

a loss rather than a gain from any such equalisation of income as would deprive the more efficient members of society of the incentive to the utmost exercise of their productive power, or of the ability to fit themselves for, and perform successfully, the important duties that devolve upon them as the undertakers of enterprises, the discoverers and appropriators of opportunities, and the accumulators of capital. To resume our illustration, we cannot assume that the marginal utility of the expenditure of $5000 is the same for every person, as it is manifestly greater for the more important members of society. Thus if we suppose that the expenditure of the first $5000 by one of these yields twenty units of utility, and there is a decrease of two units for each additional $5000 (by no means an improbable supposition), the expenditure of $50,000 by one such person would yield 110 units of utility, against 100 units when a like expenditure is divided among ten persons of less industrial and social importance.

Every economic enterprise has indirect economic, social, and individualistic results, incapable of appropriation by its enterpriser, and from which therefore he cannot realise a profit. Thus there is probably not a bankrupt railroad in the United States that has not created values to

several times its cost. The community has gained from it a great deal more than its builders and promoters have lost. Whenever these attendant results are sufficiently important, the state wisely exercises its police power either assuming, encouraging, regulating, or prohibiting the enterprise. It often happens that the economic results to others as well as the social and moral—that is the non-economic—results to society of a given enterprise transcend in importance the economic results to those engaged in it, in which case the state rightly enough lends its aid, when the natural economic inducements are insufficient to tempt enterprisers. These are the principles upon which the justification of a protective policy, or of state aid to railroads and other internal improvements can alone be based. What circumstances make it wise for the state, instead of lending its aid to the enterprisers, to assume the function of the entrepreneur itself, is a matter we cannot enter upon, further than to remark that the question must be settled, in each individual case, mainly by the proportion which the social and ethical and indirectly economic interests involved bear to the directly economic.

Historically considered, the influence which, more than any other, debarred the economist from an appreciation of the peculiar theoretic

position of the Enterpriser or, as he was then called, the Entrepreneur, was the almost unquestioned supremacy during so many years of the dogma of "laissez faire," founded upon the assumption that each producer, being the best judge of how the productive factor or factors he controlled could be most advantageously utilised for himself, would necessarily, if left to his own initiative, in benefiting himself accomplish also what was best for the community, as the good of the community was merely the aggregate good of the individuals composing it. This theory, with the important limitation that the rights of others must not be infringed upon, may perhaps be allowed to stand, if its application is confined to individualistic activities, as in them the unfettered individual does control the direction and result of his efforts, or, in other words, does determine the character and amount of his products. This is likewise true of social activities, but is inapplicable, as there is no force outside of society to control social activity, as society can and does interfere with individualistic and economic actions. The understanding of Enterprise we have now reached unveils, however, the falsity of the assumption on which the economic dogma of "laissez faire" is based, namely, that the controllers of the three subsidiary productive

factors have as much voice as enterprise in the direction of production, whereas the truth is that they have no influence at all upon it as producers, but only an indirect influence as consumers. Subject to the limitation that he must produce what consumers will pay him for at a remunerative rate, the enterpriser is the sole arbitrer as to the method and direction of production. The landlord, as such, has nothing at all to say about the crops that the renting farmer will raise; or the capitalist, as such, about how his capital shall be invested; or the labourer, as such, about what he shall work at. The direction of production—what shall be produced, how much of it, and by what methods—lies wholly with the enterpriser, who will allow the landlords, the capitalists, and the labourers only what prevailing conditions enforce. The landlord can indeed select his tenant from those willing to rent of him; the capitalist his debtor from those wishing to borrow; and the labourer his employer from those in search of hands, but here their influence over the course of industry ends. What shall be produced, how much of it, and by what methods, or for what prices it shall be held, does not depend at all upon how much the product will yield for rentals, interest, and wages, but upon the expectation of what will remain after the

necessary rents, interest, and wages are paid. In later chapters the natural consequences of this lack of coincidence between the personal interests of enterprisers and those of the controllers of the three other productive factors will be further developed, and they will be found to be very much more important than is generally supposed. It is enough for our present purposes to point out that an industry yielding a large percentage of profit to enterprise need not be one with a large production "per capita" of those employed in it. And yet the great majority of economists, from Adam Smith and Mill down, are accustomed to use "profitable industry" and "productive industry" interchangeably and as synonymous terms.

It may also be well to point out here, and at this time when complaints are so vociferous that enterprise is absorbing more than its just share of the total product, that, judged by the principle that every man is entitled to what he produces, or rather to what he contributes to production, it is really the most underpaid function of all. If I am able to make a better use of a product than its owner, do I fulfil my moral obligations by paying him for it all it is worth to him, or is he wronged if I do not pay him what the article is worth to me? It is not he but I who must be regarded as the creator of the

additional value in dispute. The difference between what a day's labour produces when aided by capital, opportunity, and enterprise over what the same day's labour could produce unaided is manifestly created by capital, opportunity, and enterprise, and on the principle that every man is entitled to just what he produces, this difference can not belong to labour, which really, and rightly, gets vastly more than this principle of division would allow it. The principle is false—the true one being that each participant in production is entitled to share in the product in proportion to the sacrifice he has made, the sacrifice, however, not of pain as so generally assumed, but of purchasing power—the sacrifice he has made of what he could have obtained instead, if he had otherwise directed his energies; or rather this represents the minimum to which each is entitled. When the sum of the minimums is less than the value of the product, the difference may be absorbed by any one of the factors without injury to the others. This principle is evidently a just one unless unequal customs, or unjust laws, have unduly increased, or decreased, what any one of the participants is able to exact, as compared with his proper proportion. To the extent this occurs its operation may injure the working man, but as a matter of fact all such injustices suffered,

great as they may be supposed to be, take away but a small moiety of the additions to wages directly resulting, not from anything labour does or has done, but from the existence of opportunity, capital, and enterprise created by others. As an individual the labourer may be wronged to the extent that he has been victimised by monopoly, but simply as the exerciser of the labour function he has been, on the whole, greatly benefited. It is only as the distribution of the product has been affected by unjust privilege that the labourers have any valid cause of complaint. The refrainer is certainly entitled to all the pure interest he obtains. The enterpriser likewise is entitled to a profit equal not only to his own subjective valuation of the risks and responsibilities incurred, but to one almost equal to the subjective valuation of the possible competitor, who has just been deterred from assuming his enterprise. The owner of an advantage, however, has no moral claim at all to any income from its use when the advantage itself has been obtained by violence or fraud. When, however, the violence and fraud have been legalised, or established by custom, the whole community is to blame, and cannot "come to court with clean hands" seeking redress, especially when the opportunity, wrongly obtained originally, has come into the possession of inno-

cent third parties. To what extent this principle is applicable, and how it and the other legal principle of *caveat emptor* are to be reconciled, are moral questions lying outside the boundaries of our present investigation. To the extent however that opportunities are legitimately appropriated, the title to them is founded either upon discovery, or upon the special ability to so employ them as to add more, or at least as much, to the product as the rent obtained for their use is worth. As we have seen, the discoverer always benefits others as well as himself, and the private ownership of land is amply justified, if under it the land is so much better utilised and improved that the additional product obtained is greater than the rental its use commands. The economic right of the individual to legitimate rentals is as clear as his right to wages. Just however as individualistic rights must be yielded when social needs require the sacrifice, as occurs when conscripts are forced to fight the nation's battles, so opportunities, however legitimately acquired, can be rightly confiscated when society judges the discoverer sufficiently compensated, or that appropriations have ceased to produce, in the hands of individuals, an excess over what they would produce if socialised, equal to the rentals charged.

Even the isolated savage, living without barter and entirely on the proceeds of his own labour, betters his condition considerably by the exercise of choice in his occupations, instead of blindly following the inclination of the moment. His product is only partly the fruit of his brute force. But leaving out this small element of enterprise, it is evident that his income can be increased only by the use of capital, the acquisition of opportunities, and the increase of the element of enterprise which accompanies the use of opportunity and capital. And the further increase of income due to bartering involves a further increase of enterprise as a cause of income. Everything, therefore, that a hired labourer earns beyond what an isolated savage, without tools or barter, could obtain, is made possible by capital, enterprise, and opportunity (the appropriation of which is an act of enterprise), partly indeed his own, but mainly contributed by others. Of course, nothing can be produced without labour, but that is a very different proposition from the ignorant assertion that labour produces everything, or even from the hardly less ignorant assertion that labour and capital jointly, or even that land, labour, and capital jointly, produce everything. The real rule of equity in the division of the

product is that it shall be according to the sacrifice involved—not the sacrifice of pain or effort, but the sacrifice of giving up what might have been acquired instead—and this division is necessarily secured by free competition, with perhaps the possible exception of gains arising from the appropriation of some special opportunities, the effect of which will be considered later. It is enterprise which assumes the risk of innovation, and consequently all advance in civilisation is primarily due to it, but, as President Walker has so clearly demonstrated, the benefits of civilisation, after yielding temporary tolls to enterpriser and capitalist, finally go entirely to the consumer and, so far as the labourer is a consumer, to the enlargement of real wages—a benefit to which the labourer, as such, has contributed absolutely nothing.

It has, I think, been an almost universal custom among economists in studying the inter-relations of the economic forces, to treat these inter-actions of land, capital, and labour as direct, whereas, owing to the supremacy of Enterprise, their inter-relations are always indirect only; that is to say, any change in land, capital, or labour can only cause the necessary complementary changes in the other subsidiary factors indirectly, through its effect upon enterprise and profit; and later I will en-

deavour to show some such inter-actions which, from the neglect of this principle, have escaped notice.

Another very important characteristic of Enterprise is to be found in the fact that normal profits tend to appreciate in a geometrical rather than an arithmetical progression, when compared with the degree and quantity of risk involved. Provided the security is thereby unimpaired, the rate of interest is no larger on great, than on small, sums loaned, unless, of course, the loan is so large as to create a scarcity of loanable funds, and then the rise is in the general rate of interest; and a large number of labourers can be hired at the rate of one, provided the demand does not press upon the supply of a special kind of labour, and then the advance obtained is at the expense of other labourers, or of a general rise in wages. But individuals will only be tempted into large ventures by an expected rate of profit much greater than will induce them to put a small portion of their funds into ventures of equal risk, and they will even venture small sums without any real expectation of profit, that is, they will risk a small amount on what they know to be an even chance, for the mere excitement of the thing, as is seen when a man takes a "flier" with funds he has no immediate

use for. The reason for this will be at once apparent to every one acquainted with the Austrian theory of value, and need not be dilated upon here, further than to call attention to the fact that in this lies the secret, not only of the increase of corporate effort and organisation, but also of the more rapid industrial evolution which has accompanied it, and in great part been caused by it. Owing to this circumstance, vast fields of industry have been subjugated by corporate effort, that individuals, or even co-partnerships, would never have dared to enter.

But not only does the expected rate of profit, and therefore on the average the rate of net profit obtained, expand more rapidly than the size of the venture increases—more rapidly than the quantity of the venture,—but it also expands more rapidly than the degree of the risk—more rapidly than the quality of the venture. No properly constituted business man, just satisfied to take a given risk for an expected profit of five per cent., would consider for a moment a venture of the same amount, which he regarded as just twice as risky, for a profit of only ten per cent. How much more he would exact would depend upon his individual temperament, and such risks would naturally be left for those who would be

satisfied with the least excess over ten per cent., but some excess would be a *sine qua non* to the consideration of the venture. We have here a case in which national and individual interests conflict. It is to the interest of the nation at large that, other things being equal, labour and capital should be diverted from industries in which the normal rate of profit is small, to those in which it is large, as is naïvely shown in the common statement that the wealth of a successful people is due to their progressiveness and enterprise, which is really saying that it is due to their willingness to engage in novel and hazardous undertakings. Doing so is perhaps more a matter of habit than of racial characteristics, and it is quite within reason that the increased diversity of industry due to a policy of protecting manufactures by an agricultural country might effect such a diversion, to the perceptible increase of the national income, as to whatever causes it is due, it is certainly a fact that the normal rate of net profit in manufacturing and commerce is greater than the normal rate in agriculture.

There is a connection between Enterprise and Opportunity, which does not exist between Enterprise and the other two subsidiary factors, in that Enterprise creates Opportunity,

but can do nothing, directly at least, to either the creation or the enlargement of Capital or Labour. The appropriation of unoccupied land; the availing oneself of a neglected opportunity, and the conversion of "Circulating" into "Fixed" Capital, are all acts of Enterprise, and the selling value of the land and the capitalised value of previously neglected opportunities and new processes, and of fixed capital, in excess of its cost in circulating, are all, in the first instance profits. And it is entirely in the cost to the enterpriser of creating Opportunity that the field for investment is to be found, except of course as the field is widened by any circumstance that renders it possible for the enterprisers to increase the aggregate of salable commodities carried in process and in stock, without depressing profits below the normal expectation. Of course the field for profitable investment can be contracted as well as expanded. Anything which increases the cost of production necessarily decreases demand and makes redundant an aggregate of capital formerly capable of profitable employment. Thus a failure of the crops lessens the amount of goods which can be profitably carried in stock, and entails therefore the discharge of some artisans and the idleness of some fixed capital. A panic likewise by curtailing credit and incit-

ing distrust of the future leads to frantic efforts to reduce the "stock in trade" carried by middlemen. In both cases, despite some decrease in its aggregate, capital cannot be as profitably employed as before. The proportion of capital to the uses enterprisers have for it has increased despite any loss of capital that has occurred.

The activity of enterprisers is limited in its scope by the means of which they must avail themselves to produce at all. These means must, however, bear a certain proportion to each other to be available to them, or rather the others must bear a certain proportion to labour —the most inflexible and inelastic of the three. It is beyond the power of enterprise to exploit opportunities, or to utilise the savings of others, when labour is lacking or too expensive. All the enterpriser can do is to make the most of such labour forces as he can hire at prices he can afford to pay. When this point is reached, he has no use for further advantages unless they are better than those previously utilised, and can be substituted for them. Neither has he any use for additional capital, and this matter unfortunately is not under his direct control as he is not the only accumulator. And, even when he is an accumulator, he does not accumulate in his character of enterpriser, but as an

individual consumer, and is actuated in accumulating by an entirely different set of motives from those regulating his assumption of responsibility, so that the two actions are entirely independent of each other. But whoever is the accumulator, he is forced to borrow or retain the accumulation, whether he wishes to or not, as the actual ownership of all accumulations is necessarily his. But the only uses the enterpriser has for the accumulations forced upon him, is to invest them in opportunities, or to allow them to increase his goods in process and the stock of salable commodities he is carrying. The first of these uses he is always anxious to avail himself of, but finds himself limited by the state of the arts, and by the extent of the demand for the consumable goods that would result from the employment of the additional facilities. The latter use, however, he persistently avoids so far as he can, as his constant effort is to reduce his stock of goods in process to the utmost extent that his own convenience will allow, and of salable commodities to the amount which the convenience of his customers demands, and for which they will therefore pay a price that will recoup his expense of carrying, with a profit. While, therefore, in a new and undeveloped country enterprise may be circumscribed by want of

capital that could be profitably invested in the creation of opportunities, it cannot anywhere occur that enterprisers are hampered by want of capital in their employment of labour. It is always the want of a market and never a deficiency of funds to pay labour that restricts enterprise. As a matter of fact it is just when the aggregate of circulating capital is the least, and the stock of unsold goods the smallest, that the most labourers are employed and the aggregate of wages is the largest.

The unfortunate assumption that there is a direct relation between capital and labour, responsible for the ridiculous assertion that "capital employs labour," is the cause of most of the prevailing misconceptions on this subject. The recognition that they are both means, and are only related to each other indirectly through their common relation to enterprise, makes the matter very clear. The enterpriser, as such, employs his three means solely for the purpose of obtaining a profit, the amount of which is regulated, as to its lower limit, by his subjective valuation of the irksomeness of the responsibilities he has to assume. He will not, therefore, avail himself of such opportunities, or hire such labour, as do not promise him a profit which he regards as satisfactory. As to capital, however, enterprisers as a body are dif-

ferently situated in being forced to borrow and employ it whether they will or no. The only way they can relieve themselves, and restore the rate of profit to a satisfactory basis, is to lessen their productive activity, until the relative increase of consumption has depleted captal to a point of equilibrium with labour and opportunity, at which its employment will again yield a satisfactory return.

This is so because the loss of value, which is due to declining markets or to any other cause, does not fall primarily upon the capitalist but upon the enterpriser. This loss is always, in time of business distress, much greater than pure interest and cannot therefore be made up to him by a decline in the rate of pure interest, especially as such a decline is necessarily counteracted in whole or in part by a further decline in the market for his products so long as the stock he is carrying remains unsalable at cost of production, so that practically the only relief afforded the enterpriser by a decline in the rate of interest is the check it affords to accumulation—a check which does not become effective in restoring normal profits until after the long interval during which consumption is overtaking production, and reducing the aggregate of capital to its normal proportions. To await this adjustment of relations by a decline in the

rate of interest, the only one now recognised as possible by economists, would spell ruin to all enterprisers. For, as long as production and accumulation were continued at the old rate, the rate of interest might be reduced to zero, without causing any reduction in the stock of commodities unsalable at cost of reproduction. Fortunately for them they have it in their power to hasten the re-adjustment by lessening their employment of labour—which the more hardly pressed find as well for their individual interest as for the advantage of their class, which latter motive indeed need not, and in fact does not, influence them at all. Surely no observed facts are more patent than that it is when profits are low that employment is scarce, and that low profits are always the result of an accumulation of goods unsalable at the cost of reproduction.

The claim of supremacy, made here for enterprise, is a matter of such great scientific importance and, if misunderstood, so sure to arouse antagonism, that I will be pardoned for commenting further upon it, even at the cost of some repetition. So far is it from being a return to the discarded ideas of the Physiocrats and Mercantilists about the "surplus," that, in the most important particular, it is in more direct opposition to them, than the prevailing conception of the productive process. In one thing, which their

successors have ignored, these ancient economists were right—namely in the intuitive perception that the expectation of a net gain resulting is, and must be, the determinant of every human action, and the ruling and decisive motive to all volitional activity. The mistake they made was the very common one of arguing as if the profits of the community—in the sense of the national gain from industry—were merely the aggregate of the economic profits of the individuals composing it. And even here they stumbled again, confusing savings with profits. As an individual's annual saving may vary greatly from the amount of his business gains for the year, so the annual accumulation of a nation is no indication at all of the gross amount of its economic profits—if for no other reason, for the very simple one that there can be no national economic profit at all, because the nation is not, and cannot be, an economic entrepreneur, the only possible recipient of an economic profit. The savings of neither an individual nor a nation can act as an incentive to further production. At the best they are only a means that can be utilised for that purpose. The inference that the "national surplus" was the final end and object of all industry was not only ridiculous, but also mischievous in the inferences drawn from it. And it

was against these inferences that Adam Smith and his followers revolted. But these inferences were of exactly the same order and falsity as one which still prevails, and which the theory of the productive process I have advanced combats. While everybody recognises that accumulation is not an end in itself but only a means, no one seems to have perceived that as a means it must find its limitations, not in the motive that leads to accumulation by the marginal accumulator—viz., in the rate of interest obtainable for it—but in the uses to which it can profitably be put by those who are forced to employ it whether they will or no. As the expectation of interest is not the only motive leading to saving, it is conceivable that excessive accumulation might occur without it. Under such circumstances—that is when interest was eliminated as a cost—enterprisers would still surely curtail production to the point where the ability to accumulate would be restricted to the amount that enterprisers could find a use for with satisfactory advantage to themselves.

So far is our concept of the productive process from viewing the "surplus" as the measure of a nation's prosperity, that it holds the reverse of this proposition to be in a sense true, and that a low rate of interest and a low rate of normal profit are the most essential conditions

of industrial success. If the accumulation of capital was not limited by the uses to which it could be put, the totality of the product would not be affected by the rate of interest being high or low, but as it is so limited, the lower the rate the more capital enterprisers can find use for. As to profit, the lower the normal rate the greater the number of enterprises business men will be willing to undertake. The smaller the share of the product that contents capitalists and enterprisers the greater the total of the product will be. All our theory contends for is that if the normal rate of profit be established, as it will be, by the seriousness of the risks enterprisers believe to be involved, it is during the periods when the rate obtainable is above the normal that we enjoy industrial activity, and when profits are depressed below the normal we suffer from industrial stagnation. When the normal rate is unobtainable, industry slackens, thus lessening the ability of all classes as consumers to add to their accumulations. On the other hand, when profits exceed the normal, two readjusting forces are released. The competition of enterprisers with each other for the means of production becomes keener and the accumulation of "capital goods" is stimulated. Thus it comes about that the marginal enterpriser, taking one period with another, obtains

exactly the normal rate of profit. All attempts of the other classes to deprive him of it, and all his own attempts to exceed it, put in motion self-acting reactionary forces which very shortly restore the balance, so that in the end the marginal enterpriser obtains just the normal rate and no more. This normal rate of course depends upon the subjective valuation which he places upon the irksomeness of the responsibilities and risks he will be forced to assume if he concludes to undertake a marginal enterprise.

A similar argument as to the average rate of profit would be true only with some limitation. The average rate of profit is, of course, considerably greater than the normal or marginal rate. Other things being equal, it would, of course, vary with it, and the same argument would apply. But many circumstances can occur which will increase the average rate without disturbing the normal, at least to a corresponding extent. Thus an invention that did away with expensive machinery and created an additional demand for labour might, if very profitable, raise the average of profit while depressing marginal profits below the previous normal, in which case, total production remaining the same, enterprise would receive a larger proportion of it than before. New and especially successful enterprises must raise the

average of profit much more than they can affect the marginal rate. But these influences are temporary and self-adjusting, so that a fairly constant proportion between the normal rate of profit and the average rate undoubtedly obtains in the long run.

It will doubtless be claimed that a similar control over the volume of industry is exerted by the subsidiary factors—those factors which furnish the means with which enterprisers accomplish their purposes. And in one sense this claim is valid, and in it the other classes could find a way of protecting themselves against very excessive exploitations by enterprise (the result of any combination of enterprisers to limit competition among themselves). If enterprisers will not pay a satisfactory rate of interest, capitalists may refuse to add to their accumulations. If they will not pay satisfactory wages, labourers cannot indeed long refuse to work, for they must have the wherewithal to support life, but they can and indeed must lessen their consumption, and thus keep the stock of salable goods above the total that allows satisfactory profits. As to the owners of opportunities, they are indeed helpless so far as opportunities are appropriations, but to the extent that opportunities are not found and seized, but made, they can refuse to con-

tinue investing. Enterprise must pay those who furnish it with the means of production sufficient to insure the continued creation of such means in the required amount. But a more careful analysis makes it evident that the analogy between the two kinds of control will not hold. An individualistic workman is of course limited, in the amount of work he can accomplish, by the character of the tools he works with, so that in a certain sense we can affirm that what he will produce is controlled by the tools he uses. But this control is evidently of a very different character from that exercised by the enterpriser in deciding upon the character and amount of what he will produce. It is control only in the sense of being a limitation, whereas the other is control as well in the sense of choice and direction. The former is merely negative, the latter is positive. There is a difference between limiting the means and controlling the use of means furnished. In economic activity, labour, capital, and opportunity are merely the means utilised by enterprise in production. Production is indeed controlled in the sense of being limited by what the enterpriser can find to utilise; but what direction production takes and its amount is controlled, in the sense of being determined, by what the enterpriser expects will be left to

him after the cost of production is satisfied. Thus enterprise, like a limited monarchy, is supreme or dominant, but not independent. Its will is law within the limitations that it shall not impair the efficiency of the means it uses to accomplish its purposes. Just as any monarch, even an absolute despot, defeats his own purpose of self-aggrandisement by the exercise of a tyranny that ruins his subjects, so enterprise defeats its own purpose by denying sufficient remuneration to those who furnish it with the means essential to its productive efficiency.

The acceptance or rejection of the theory of the productive process here advocated will depend upon whether the uniqueness claimed for the function of enterprise is acknowledged. In the present conception of that process, the peculiarities of this function have either been largely disregarded or considered as insufficient to put the enterpriser in a class by himself. The author's contention is that this violates the principle of classification that the various sub-classes of a common genus shall be differentiated by cognate peculiarities. Labour, capital, and opportunity are all means of production utilised by the enterpriser. Is enterprise also a means of production utilised by the enterpriser? Defining it as co-ordination

makes it such a means. Defining it as the assumption of responsibility removes it from the category of means of production. A means must antedate the result—it cannot come after it. The responsibilities of ownership cannot arise before the creation and appearance of the thing owned. Subjecting oneself to these responsibilities cannot therefore be a means employed in production, but is only a condition inseparably attached to the results of production. The choice of what conditions he will subject himself to does indeed antedate the product, but the exercise of choice, like every other exercise of the mental faculties, is an act of labour and does not of itself entitle the chooser to the residue of the product. This residue is neither determined nor earned until the product is sold—until all the risks and responsibilities have been undergone—whereas rent, interest, and wages are predetermined in amount before production is commenced and at the moment opportunity, capital, and labour are devoted to the creation of any particular product. It is evident from this that it is not the mere exercise of choice of risks, but the actual subjection to them, that entitles the assumer to the residue of the product. Enterprise cannot be classed among the means of production, though it is a member of the wider

class of sharers in the results of production. These sharers are properly divided into two classes, those who accept the conditions attached to the results of production and those who furnish the means of production. And as the former class are necessarily those who employ the means, the subsidiary distinction between means must be made with reference to the use to which they are put by those who employ them—which is to say that opportunity, capital, and labour must be defined in terms of their relation to enterprise, their employer. This granted, as it surely should be, the general conception of the productive process here taken follows as a matter of course. On the other hand, as it is unanimously conceded that the enterpriser is the one who employs the means of production, it would follow that if enterprise is co-ordination and therefore a means of production, it must be defined in terms of its relations to itself, which is a logical absurdity really involved in the present conception of the productive process.

It must not be overlooked that the exercise of the function of enterprise is inseparable from volitional activity. In social production we are all joint enterprisers. And in individualistic production every one is an enterpriser, though not an economic one. The workman

who seeks to benefit himself by a change of occupation necessarily takes a chance, subjects himself to an uncertainty, and assumes a responsibility. It is the expectation of benefits, uncertain and unpredetermined in amount, that prompts his action. This change of employment however, being a purely individualistic matter, makes him only an individualistic enterpriser. Employment by another once accepted, he becomes only an agent, and, as such, no longer subjects himself to the results of the efforts he puts forth, under the direction and at the risk of his employer. This abnegation of responsibility is a benefit to the labourer or he would not hire out. It is also a benefit to his employer or he would not employ labourers. The interest of society lies of course in the total benefit being as great as possible. Society is also interested that the division of the benefit, between the two classes of employees and employers, should be such as to yield the greatest sum-total of utility. It does not follow from this that the income of the individual employee and the individual employer should be so adjusted that the marginal utility of each is the same. Even in an ideal, that is in a socially perfect, distribution individual incomes would have to be proportioned in accordance with the importance of the functions performed.

Matters being as they are, however, it is the business of Economics to inform us of the principles, governing the division of the product, resulting from the transfer of responsibility to the shoulders of the economic enterpriser, and surely they cannot be discerned and formulated when the patent distinction between means employed to produce a result and the inherent conditions attached to an accomplished result is ignored.

When we spoke of the totality of the product as the aim of individualistic effort, we meant, of course, only the total acquired by the individual himself, and it is perfectly possible, as is recognised by the extremest advocate of *laissez-faire*, that the individual, in acquiring the most for himself, may so interfere with the opportunities of others as to decrease the total product of the community. Likewise, when we speak of the totality of the product as the aim of social effort, we mean only the greatest amount of product of the kind the state elects to have. There exists, of course, no guaranty that the state will act wisely, either in the selection or division of the social product, or will adopt the best and easiest methods of producing it. History is one long recital of the struggle of social classes to influence in their own favour the nature and division of the social

product, usually to the waste of the social product itself. The results of neither individualistic, social, or economic productivity are by any means ideal.

The Physiocrats are entitled to the credit of having recognised that enterprise is the dominant productive factor, and that the other factors are under its direction. But they mistook the content of the term in reasoning that because enterprise was dominant the other productive factors existed only for its benefit, and that the community was prosperous in the proportion in which the "surplus" was enhanced at the expense of wages and interest. Adam Smith and his immediate followers naturally revolted at this proposition and its corollaries, and, as is usual in such cases, swung the pendulum too far in the other direction by almost entirely ignoring enterprise, and by promulgating the dogma of *laissez-faire*, from the results of which errors economic theory has not yet wholly recovered, although a constantly growing tendency towards the repudiation of *laissez-faire* and the fuller recognition of the function of enterprise is very marked—a tendency which appears, to the writer at least, to culminate naturally in the view of the productive process here taken.

Adam Smith, wishing to discard the domin-

ance of enterprise as then misunderstood, and accomplishing his object by practically ignoring enterprise, paid an unconscious tribute to its dominance, rightly understood, by treating the science as a study of three productive factors only—land, capital, and labour,—passing over without any proper comment or attention the fact that four distinct species of income existed, one of which—namely profit—was unaccounted for. And the habit still prevails even among economists who recognise the existence of the entrepreneur as a fourth factor. A very casual acquaintance with economic literature will, I am sure, convince any one that almost invariably profit is either treated as a negligible quantity, or lumped together with interest as if they were practically homogeneous. To a certain extent this usage is explained by the fact that enterprise is not a productive factor in the same sense as land, labour, and capital. These latter are prerequisites or means to the attainment of a desired end. The responsibility inseparable from ownership is a consequent of the attainment of the desired end. They are the means by which a product is obtained. It is an irksome condition imposed by the product having been obtained and being retained. This irksome condition being exposure to the risk of a loss, no one will subject himself to it unless

the chance of a gain is greater than the chance of loss. Necessarily, therefore, the incentive to subjecting oneself to a risk must be an unpredetermined residue, whereas the rewards of land, labour, and capital are predetermined in amount. Moreover they are always positive, whereas it can be negative as well as positive. From whatever point of view we regard enterprise it appears as belonging to a different order of phenomena from land, capital, or labour. And the same is true of profit when compared with rent, interest, and wages. One sense of the term "productive factor" does not include enterprise. In another and truer sense it is the only productive factor. The instinct, therefore, which has refused to regard Economics as a study of the interactions of four coequal factors was a correct one, and has properly persisted despite the attempt to formally reduce enterprise to the plane of the others, by defining the entrepreneur as the co-ordinator—for co-ordination, like land, capital, and labour, is a prerequisite means of production. But the reward of a prerequisite must, from the nature of the case, be predetermined. This though never verbally expressed has been intuitively felt. As it is really impossible to attain clearness of thought or expression when enterprise is treated as the co-equal of the other

factors, economists have been unconsciously forced to adopt Adam Smith's method of practically ignoring enterprise and profit in their theories. Any one who takes the trouble to investigate the literature of the subject will, I think, be astonished to find how prevalent this inadequate treatment of economic profit is. As a matter of fact profit does not perhaps get over a tenth of the notice given to interest, whereas in actual importance the ratio should be just the other way, as the aggregate of net economic profits is probably from five to ten times that of pure interest.

In these times when a disposition seems to be rapidly developing to deprive the enterpriser of a part of his gains, whenever his ventures turn out more favourably than was expected, it is very important that the true conception of the enterpriser, and his function, should be established in the popular consciousness, so that it will be readily recognised how far this tendency is legitimate and what danger there is of its working, not only an injustice to enterprisers, but also an irreparable injury to the community in the attendant discouragement of enterprise.

So far as the tendency in question is merely an attack upon unjustly appropriated privileges, it is manifestly morally justifiable, though

it does not follow from this that the community would be acting wisely in confiscating such privileges, though well within its rights in so doing. The community often gains more than it loses by being robbed of a franchise. The acquisition of the franchise for a tramway on Broadway was an exceptionally gross example of political corruption, and a bare-faced robbery of the citizens of New York. Nevertheless, the saving of time, trouble, and expense these same citizens enjoyed, between the time the tramway was put into operation, and the time an honestly acquired franchise would have secured a similar tramway, was worth vastly more to them than the value of the franchise they were defrauded of. As a matter of dollars and cents, the community can often better afford being cheated than to await the advent of legitimate enterprise. This of itself should not, to be sure, stand in the way of the community recovering what it was robbed of, if that can be accomplished without too great disturbance of vested interests and too great discouragement to future enterprises of like character.

The moral aspects of the case differ, however, when to obtain for the people benefits incidental to the establishment of public utilities and of a nature the enterprisers cannot retain

for themselves, franchises are given away, or even forced upon enterprisers, by adding all sorts of inducements to their acceptance (as was the case with most of our railroad franchises, especially the transcontinental lines). When such enterprises turn out to be especially profitable the effort to tax away what is spoken of as the "unearned increment," simply because it is greater than was expected, is barefaced confiscation.

A public service franchise is, of course, accepted in the first place subject to certain implied duties to the public and to certain limitations and restrictions of the common law, and so long as these are not avoided the original venturers, or their representatives, are just as much entitled to the whole outcome of the venture, whatever it turns out to be, as the labourers who built the road were to their wages. That very unfortunate term, "the unearned increment," is perhaps more responsible than any other for the more unreasonable prejudices of the unpropertied classes, who naturally suppose themselves robbed when they are told that a large proportion of the income of their richer neighbours is unearned. A proper understanding of the function of the enterpriser and the nature of his reward shows us at once that such a thing as an "unearned

increment" of legitimate profit never did and never could exist. It is only when franchises are wrongly acquired or exploited without regard to their proper limitations that there is any wrong to be redressed.

CHAPTER VII

OPPORTUNITY

I HAVE so far, with some necessary exceptions, followed the common practice in the use of the term "land" as denoting the first subsidiary productive factor, although I regard the term as singularly inappropriate. Other monopolies existed long before Adam Smith, but he, and others since his time, have generally treated the incomes arising from them as mere transfers of purchasing power, more or less justifiable; whereas the monopolistic income arising from land was considered a necessary consequence of the nature of things. The distinction has some foundation, but its logical sufficiency for the application made of it is more doubtful. Certainly monopoly has not found any settled place in economic theory as a result of the distinction.

A gain made by thieves, gamblers, or speculators is the result of risks assumed and is therefore a profit, though not an economic one.

To the losers such transfers are a loss consequent on risks and responsibilities they subjected themselves to. The transference of value involves no change in the character of the income gained by one party and lost by the other. To each it is an item of their individualistic profit and loss account, and the general aggregate of neither profits, interest, or wages is directly disturbed. But, as profit is the only form of income which can have a negative as well as a positive value, a similar transference of rent, interest, or wages to another income of like character cannot occur. Any transfer of income from which landlords, capitalists, and labourers suffer changes its character into that to which the recipient is entitled. And any increment they enjoy accrues in the form of an increase in the purchasing power of rentals to the landlord, of interest to the capitalist, and of wages to the labourer, but is obtained in each case, as it happens, at the expense, in part at least, of other forms of income that would otherwise have accrued to other individuals. The aggregate of each separate form of income is more or less disturbed therefore by monopolistic gains, and, on this score alone, they are entitled to a place among the fundamental forms of economic income, independently of the fact, which further insures their

position, that the loss of purchasing power to the sufferers from monopoly is rarely the same in amount as the gain to those who are benefited, because monopoly powerfully affects the total amount produced—unfavourably when privileges, formerly enjoyed by the losers, are taken away from them, and favourably when the advantage monopolised has been newly discovered, and appropriated by the monopolisers.

Moreover, monopoly gains are subject to influences and tendencies radically distinct from those affecting wages, interest, or profits, and we cannot logically assign these special "laws of rent" to any place in the orderly arrangement of economic laws if we deny a place among the productive factors to monopoly, whether embodied in land or in a plant, in a patent or other right, in good-will or in secret processes. This is also evident *a priori*. For when we seek the definition of monopoly, in accordance with the principles of deductive classification, in its relation to the predominant productive factor, Enterprise, we find that what an enterpriser seeks in securing an advantage, or special facility to produce, is a competitive relation—the opportunity of applying capital and labour to better advantage. The mere control of capital and labour is

as advantageous to one enterpriser as another, unless one of them has a better opportunity, or way, of exploiting them. Manifestly what an enterpriser will pay for this better way is subject to very different considerations from those determining what he will pay for the control of capital or labour.

As the term "land" is altogether too limited for our purpose, and as the term "monopoly" has acquired such unfortunate connotations, from which the term "special advantages" is also not wholly free, I now venture to propose "Opportunity" as the general designation of this productive factor. Opportunity, in all cases, is first, either wholly or in part, obtained by appropriation—that is, it contains an element for which no purchasing power has been exchanged or sacrificed. After its appropriation, it, as well as its use, is of course usually exchangeable (if it is not exchangeable it is either a personal, or a social, advantage, and Economics is not primarily concerned with it), but it does not have its origin wholly in sacrifice, as is the case with all other productive factors. It is not without reason that, in popular speech, opportunity is so often spoken of as "seized." Nevertheless it is not on the score of its origin, that opportunity can claim a place among the productive factors. This

place is due to it only because it is the source of a peculiar form of income regulated by tendencies governing the exercise of a peculiar function. As opportunity is a subsidiary productive force, the distinction between it and the other subsidiary productive forces must be found, according to our principles of classification, in their relations to enterprise—the supreme productive force. In other words, opportunity, capital, and labour must be differentiated accordingly as the costs to the enterpriser of controlling them are affected by different considerations. Opportunity must be defined as including everything for the employment of which a rental can be obtained; Capital as including everything demanding the payment of interest; and Labour as everything capable of earning wages. Or, in other words, the productive factors must be differentiated by their function alone. The present usage of economists is exactly the reverse of this: looking upon land, capital, and labour as productive factors co-equal with enterprise they have naturally defined rent, interest, and wages in terms of land, capital, and labour, instead of defining land, capital, and labour in terms of rent, interest, and wages, as they should have done, because the character of the factor is strictly determined by the

character of the function exercised. They have not, indeed, defined profit in terms of the entrepreneur, because they have not yet succeeded in formulating any satisfactory concept of either, but their attempts have been in the same direction. Instead of studying the nature of profit to determine the function of the entrepreneur, they have endeavoured to divine the nature of profit by investigating the characteristics of individual entrepreneurs. Their observations indicated that management was the most striking characteristic displayed by the individuals who employed labourers, and they therefore assumed that they had established this by an inductive process, from which it followed as a natural deduction that profit was the result and reward of management or co-ordination. As, however, the instances are so numerous in which mere management is paid by salary or wages, it was necessary to substitute another term for it which would express a peculiar kind of management, which was never rewarded by salary or wages. And the term "co-ordination" has been pressed into the service. I will be pardoned here for calling the reader's attention to this specific instance as a very vivid illustration of the inapplicability of the inductive method to the definition of fundamental terms, and how it contrasts with

the deductive method upon which the argument of this treatise depends. It is indeed true that if the results arrived at had been submitted to a very rigid verification, their falsity would have been exposed. When the attempt had been made to ascertain the exact content of the term co-ordination its insufficiency would have become too apparent, for the reasons elsewhere stated. There exists of course a possibility that as a result of observations long enough continued, and their apparent results one after another submitted to verification, it would have been discovered that the cart was before the horse, and that the entrepreneur must be defined in terms of profit—the doer in terms of what he does. Observation would then have been directed to the discovery of characteristics of profit which would serve to distinguish the entrepreneur from the other productive factors. This task, made difficult by ignorance of the scope of the science, might not indeed be wholly impossible, but it would be supremely difficult. Until this scope is determined we cannot be sure just what an economic product is. Neither can we surely discover, by observation of individual instances, how it is divided among producers, so long, as is always the case, as the income of each individual producer is composite. Conceivably of course the truth

could be hit upon by a lucky guess and afterwards verified, but to trust to this is like expecting to find a needle in a haystack. Reversing this process, as I have ventured to do, would seem to clear up at least two dubious points in economic theory.

The first point is the occasional transmutation of one of the subsidiary factors into another. Thus if land, labour, and capital are primary, slaves are still labour force; money invested in education is still capital; all improvements to land are capital; and the net return for the use of an opportunity created by an investment is profit. Reversing the process, however, and taking rent, interest, and wages as the fundamental considerations, it is at once perceived that in making a man a slave he is changed from an element of labour force into an element of "fixed capital." Thereafter instead of earning wages for himself, he earns for his owner whatever he can use him for or hire him out at. His economic position is exactly like that of a domesticated animal. Again the return for money spent in acquiring an education does not conform to the laws of interest, but does appear as an addition to wages wholly indistinguishable from other wages. Is not such an investment really a transformation of capital into labour force, undertaken, like other

investments of capital, in the belief that it will yield a gain (in this case individualistic) in being more productive as labour force than as capital—worth more earning wages than bearing interest?

Secondly, as to the investment of capital in fixed forms, especially in the improvement of real estate, the question is somewhat more complicated. It has been assumed as a matter of course that all such investments remain capital. This, however, is unquestionably erroneous as to certain kinds of real-estate improvement, such for instance as the draining of a worthless swamp, or the filling in of shallow waters. The land thus created, exercising the same industrial function, will yield an income absolutely indistinguishable from that of other land, and its rise and fall in value will coincide exactly with the rise and fall of other land similarly situated. While this will be readily granted, it will perhaps be pointed out that the reason is that here investors have availed themselves of special opportunities, which they can hardly be said to do in the great bulk of real-estate improvements, as the amount paid for the site, or, what is the same thing, the ground rent exacted, equalises opportunity and therefore the return of an investment in buildings remains subject only to the tend-

encies regulating interest. But when we carefully examine the last assertion, we find that it is by no means accurate. Popular usage will help us out here. According to that, interest is paid for the control of abstract purchasing power. Rent, hire, or royalty is paid for the use of special privileges or of specific things, which are to be returned intact. Now why do we rent or hire any specific thing, whether it be a farm, a dwelling, or a horse and waggon, or pay royalty to a patentee? Is it not because it will enable us to utilise capital and labour to better advantage? When any builder puts up a dwelling is he not really endeavouring to create an opportunity for the use of which others will pay him? Upon what circumstance does what others will pay him for this use depend? Is it not upon the same circumstance of scarcity upon which the theory of agricultural rents is founded?

The rate of pure interest depends upon the scarcity of capital as a whole, as compared with the demand for capital as a whole. The rent of anything in which capital has been invested depends upon the scarcity of that particular class of things to which it belongs as compared with the use of, and demand for, that class of things. This is the popular distinction between rent and interest. Is it

possibly the proper theoretic distinction also? Of course the fact that certain specific classes of things can be more readily augmented than others causes the rent of such a class to approach in average amount the interest a corresponding loan of capital would yield. But does this convert rent into interest? Granting, which we do not, that such a view could be maintained of the average returns of absolutely safe loans and of real-estate improvements, it is surely not true of the temporary fluctuations above and below the average, which will manifestly be governed by the laws of rent for all real-estate improvements. Certainly no logician will claim that the two amounts belong to the same class because their average tends towards an equality when the fluctuations of each about its average are due to fundamentally different causes. If a scarcity of houses occurs in a town containing a superabundance of good vacant lots, the rental of buildings can advance without any increase of ground rentals occurring or any rise in the rate of interest. If the extra demand for houses is known to be temporary, capital will not be attracted, and, while the extra demand lasts, an additional income will accrue to house-owners that is clearly subject to the laws of rent and not to those of interest. What an enterpriser, hiring a house

or store under these conditions, will have to pay, is surely governed by the laws of rent and not by the laws determining interest. It is not a valid reply to this argument to call attention to the fact that the value of all commodities fluctuates in accordance with their relative scarcity, and the extra gains or losses, consequent on the relative scarcity of commodities held for sale, are profits and losses and not rentals. This is perfectly true, but the corresponding truth is that the extra price a dwelling, factory, or store would sell for under the supposed circumstances is a profit and not a rental. It is only the use of the house which it is here contended commands a true rent, just as a farm near a growing city will yield a profit on the investment as its value enhances, while the increase in rental it commands remains a true rent.

There seems therefore to be solid ground for the popular distinction between rent and interest; but if economists conform to this usage, as they surely should, they must make up their minds to regard capital invested in the improvement or creation of opportunities—that is all "fixed capital" and all "real-estate improvements"—as transformed into the productive factor "opportunity" and no longer capital, at least to the man enjoying their use.

The tendency recently has been in exactly the opposite direction, namely to do away with land and all other forms of opportunity as productive factors, the argument being briefly that, because the value of the land can be capitalised, the income arising from it can be considered as interest on the value of the investment, and land itself as only a special form of capital. Of course anything the title to which can be sold, agricultural land as well as a patent right, can have its value expressed in terms of capital, but not on this account will the income arising from the specific thing in question conform to the tendencies affecting interest. On the contrary the tendencies affecting the income will remain exactly what they were before. Surely what determines the nature of the income-bearer is the character of the income yielded. The thing about the subsidiary income-bearer we are chiefly interested in theoretically is why and how much the enterpriser must pay for its control. And so long as what the enterpriser pays for special opportunities is governed in its fluctuations by different considerations from those controlling what he pays for the command of purchasing power in general, merely calculating the selling value of land or other special opportunities in no way changes their real character.

As a matter of fact there is a much closer resemblance between rent and profit than between rent and interest. There is indeed one respect in which rent, or rather a certain portion of rent received, must be considered profit. And this only fails to identify them because it is not the point of view or aspect from which combination in production under personal incentive must be considered and studied. A person who invests his own capital in any form of opportunity necessarily combine the two functions of capitalist and enterpriser. This is very clear when instead of investing his own capital he borrows the money for that purpose, as then the two functions are differentiated. Interest is then simply a predetermined cost to the mortgaged landlord, just as it is to any other enterpriser, and the difference between the outcome of the investment and its cost is a true profit. In computing this difference one would naturally subtract the cost from the selling price and then add the rentals received and subtract the interest paid during the interval.

But the sum so obtained is evidently not the predetermined cost to the enterpriser who rents, hires, or pays royalties—or even the sum of such costs to all the enterprisers combined who paid for the use of the specific thing in question, not even when the hired or rented thing is

entirely used up (which time, in the case of land at least, never arrives), because there is an element of profit to the landlord unaccounted for. The explanation is that the character of rent changes in passing from the hands of the payer to those of the receiver. A like change occurs in the passage of wages. While to an employer they are the exact economic cost to him of labour, they are not that to the labourer himself, for whether we consider pain or sacrifice as the cost to the labourer of the labour he sells we cannot call either an economic cost. What the labour costs the labourer is an individualistic matter, because while he sells the result of his labour to another he does not buy it of another but creates the result himself. There is no combination of individuals in the creation of the result, as the combination consists in the selling and not in the creation of the result. If the result is of a nature which the labourer can either sell or consume and he elects to consume it, his action is purely individualistic. If, on the other hand, the labourer sells the result of his effort he gets either more or less than he could have otherwise obtained by a like expenditure of effort, and this loss or gain is to him of the nature of profit, but, though wages received are to him part wages and part profit, they are not such, but only wages, to the man who hires him.

How the landlord's case is analogous should now be plain. The fixed capital invested in is his product as an enterpriser, but his withdrawal of his fixed capital from the market is an individualistic act, and his ownership also individualistic until he puts it again on the market, when it becomes economic. To be economic, power to purchase must be active, not latent, just as the result of the labourer's physical or mental efforts must be sold to become such. Everything held for a market is economic. Anything withheld from the market in order that it may be used as a facility for production is not while so held an economic quantity, but its use is an economic quantity because it is in the market. Consequently Economics cannot go behind the use by itself, but must rely on the science of individuality for any further analysis, if for fuller understanding it is necessary to go behind the use. The definition of the enterpriser is that he is the utiliser of capital, labour, and opportunity, without being, as such, the owner or furnisher of any of them, though he is the owner of the product. While it is true that the recipient of rent is necessarily an enterpriser, because he owns the rented article which is his product, he is the furnisher of opportunity to some other enterpriser, or if to himself it is as an enter-

priser engaged in another undertaking—that is as producing something else than the opportunity he owns, which in this case we must regard as rented to himself, just as we regard every individual enterpriser as loaning his own capital to himself.

What the user of an opportunity will pay for the privilege of utilising or using it does not depend upon the cost of the opportunity, but upon what its use is worth to him. Neither does the worth of the use depend upon the capitalised value of the opportunity, but the capitalised value of the opportunity depends upon the worth of the use. It is therefore the worth of the use which is an element in the "cost of the product." And what this worth will be is evidently governed by considerations so different from those which determine interest and from those which determine profit and from those which determine wages, that rent must hold its place as a fundamental form of economic income clearly distinguishable from interest, profit, or wages.

Neither can the force of this argument be broken by the claim that the capitalised value of an investment of "fixed capital," though it may vary to almost any extent from the value of the original investment, is nevertheless arrived at by a discounting of the expected value

of its use, so that the selling price of the "fixed capital" will equal in amount a capital sum, yielding an equal income in the form of pure interest. If this were true it would by no means prove that the income arising from an investment was of the nature of interest, because interest is a percentage of the original principal that varies from year to year in obedience only to the supply of and demand for purchasing power in general, whereas the annual return on an investment is exposed to a great many other influences, and is affected only in a very slight degree by the relative abundance of purchasing power. Consequently while the capitalised value of a loan cannot change from a change in the going rate of interest, the capitalised values of all investments are not only affected by changes in the rate of interest but are constantly fluctuating from influences which have manifestly nothing to do with the prevailing rate of interest. But it is not even true that the capitalised value of an investment is obtained in the simple way assumed. Take the extreme case of land and if we find it selling at about "twenty years' purchase," it rents for about five per cent. of its capitalised value, whereas a like sum of capital will command only about two per cent. of pure interest. Possibly the difference is

partly explained by the expected expense of taxes and repairs. But it is not wholly so explained, as no investment of capital is ever made without an inducement, and this inducement, whatever form it takes, is always the expectation, justified on the average and in the long run, of getting more income from investing capital than from loaning it. In other words the capitalised value of land, or of fixed capital in any form, is expected to earn a profit as well as pure interest. And the same is of course true of an investment of capital in saleable commodities, which also have a capitalised value varying from day to day as the market fluctuates, though so far as I am aware no one has ever claimed that the net gain arising from holding such commodities for a market was of the nature of interest, though it is commonly but erroneously held that such commodities are themselves capital.

The special advantage, possessed by any one, is not calculable from a comparison with a competitor, wholly without any similar facilities for production, for such an individual cannot usually compete at all. If the marginal producer of a certain commodity is such because he is using old-fashioned machinery, no part of his income, though it is certainly a "facility for production," arises from his possession of it, as

is well understood by economists, nor if he sells it can he get anything more than its value as scrap. There is therefore such a thing as "no rent machinery" as well as "no rent land." The limit of what a marginal manufacturer will pay for the use of improved machinery is not the interest on its cost, but the advantage it gives him over his marginal competitor, who is using "no rent machinery," less of course the lowest profit that will induce him to subject himself to the risks involved in making the change. But he rarely has to pay all of this, as his gain in substituting improved machinery for old is frequently many times as large as the smallest profit that would lead to the change. This however is not due to his unwillingness to pay, if necessary, the full value to him of the advantage gained, but to the fact that the owner of the patented machine will not find it to his own advantage to exact all that he could, and would exact, if our manufacturer was his only possible customer, as will at once be perceived by any one conversant with the laws of monopoly price. But whatever the manufacturer pays for his advantage, he at first exacts its full value, or very nearly its full value, from the consumer of his product, and that without raising the price to the consumer, thus again showing us that the

income arising from embodied opportunity is of the same kind as the rent of land, in that neither of them affect the price of the product, except as the aggregate amount of the commodity brought to market is increased. Later of course the price is affected, but it will be lowered instead of raised. Here again its nature as rent becomes apparent. It is lowered because the competitor at the old margin is driven out of business, just as the settlement of new and more fertile lands raises the limit of culture, and lowers the price of agricultural products and the rentals of old farms.

Of course the time eventually arrives when the gain from the use of new and improved machinery exactly equals the interest on the investment cost. This equality is, however, only momentary, for the progress of the arts renders it certain that even when kept in perfect repair it, in its turn, will become obsolete, and the income derived from its use will steadily decrease below the rate of interest on investment cost, until it itself becomes marginal machinery and yields no income at all.

Now, it is open to any one who insists on classifying "fixed capital" with capital, and on considering the income, derived from its use, as interest and not as rent, to claim that the average return, taking the life of the machine as a

whole, will equal the interest on the investment. This claim will not, however, stand examination. That the value of the total use will equal the investment cost and the interest upon it is not even the minimum expectation of the enterpriser installing the machine in question. His real expectation is always greater than this, the difference, of course, being his profit on the investment, and it is expressed in the capitalised value of his plant in excess of its cost, but comes to him in yearly sums whose amount is governed by the laws of rent, and not by the laws of interest, just as an increase in the value of the use of a farm accrues in the form of rent, but also affects the market value of the farm and appears as a profit when the old and the new selling prices are compared.

Of course when the advantage in question is like that conferred by an inexpensive tool, easily acquired by all competitors including the marginal one, users of the tool soon lose any relative advantage conferred by it. The difference, however, is one of degree only, and cannot therefore serve as a distinction of kind. In such cases there is a near approach to interest in the amount of income derived from its use, but because two incomes tend to be equal in amount is no proof that they belong to the same species, unless the coincidence is entirely

due to the same causes; but, as we have already seen, the fluctuations in the value of a use about its mean are due to a different set of causes from those affecting the variations of the rate of interest about its mean, even when an equilibrium tends to be established between the means.

I do not remember to have seen it noticed that the fluctuations in the value of commodities held for sale, which are generally regarded as items of capital, are by no means subject to the laws regulating the rate of interest. The net income arising from these fluctuations is correctly considered a profit or loss, as the case may be. And yet these fluctuations are manifestly governed by the same law, that of scarcity or of the action of demand on a restricted supply, that regulates rentals of all sorts. Why, then, is the special kind of income in question neither interest nor rental, but profit? It is, of course, easy to understand that the gain arising from the enhanced value of any saleable commodity corresponds to the gain to a landlord arising from the enhanced value of his farm, and that both are of the nature of profit, and that no income of rent arises from a "stock in trade," because holding it for a market is not a use. But if a trader's stock is capital, why is not any income that

arises from carrying it interest, rather than profit? The reason is to be found in the fact that capital does not consist in any aggregate of specific things, but in command over purchasing power in general. Capital is invested in saleable commodities just as it is invested in land or a patent right, but the specific things in which it is invested do not thereby become capital any more than land or patent rights do. The capitalist, as such, owns nothing but a claim; the enterpriser and the landlord are the only possessors of specific things, and therefore any income arising from the ownership of property accrues to the one as a profit, and that from its use to the other as a rental; while the income arising from the ownership of a claim accrues in the shape of interest to the capitalist. This whole subject, about which prevalent ideas are at the least somewhat hazy, clears up at once when viewed from the standpoint of enterprise, and it also becomes apparent that to speak of "fixed capital" or "circulating capital" really involves one in a contradiction of terms, as capital cannot be what it is invested in.

As soon as enterprise is recognised, as the only standpoint from which economic phenomena can be perceived, fully and in their due proportions and relations, the character of rentals as a fundamental form of income, and of oppor-

tunity as a real productive factor, becomes very obvious, and the distinction between rent and interest very plain and simple. Interest is what enterprisers can be forced to pay to obtain a certain amount of command over general purchasing power, when the return of the loan is made absolutely secure, and its fluctuations depend of course on the supply of and demand for purchasing power in general. Rental, hire, or royalty is what enterprisers are forced to pay for the special opportunity or advantage in production afforded by the enjoyment of special privileges, or by the use of specific things to be returned intact, and its fluctuations are determined for the use of each specific thing by the supply of and demand for such use alone, whether such specific thing be land, a store, factory, dwelling, or a horse and waggon, or only an idea. The fact that the supply of some of these things can be more readily and quickly increased, through a transformation of saleable commodities into articles held for use, while it tends to bring about for such things an approach in the total amount actually received as rent, to the total amount that would have accrued as interest and profit combined if no such investment had been made, never makes them identical either in character or amount. There is always some interval before supply catches up

to an increased demand, and a longer interval before a supply already in existence can adjust itself to a decreased demand, because this adjustment can result only from the consumption or the wearing out by use of some of the specific things in question. During these two intervals, the laws of rent are alone operative. And the laws governing rentals are still alone operative, when this equilibrium happens to coincide with the equilibrium established by the laws of interest for purchasing power in general.

As to privileges, such as those covered by patent rights or those for the use of which a royalty or rental is exacted, the principle is the same although the details are different. Here the supply is theoretically inexhaustible, although practically the utilisation of the privilege is limited by the labour available and by the amount of capital in the possession of those upon whom it is conferred. The limitation is in the effectual demand, as is well understood by economists, and we need not follow up the matter here, as no one should now deny that land rentals and royalties are incomes of the same species. What we have to prove here is only that the income arising from the use of specific things capable of indefinite production belongs to the same species when held for use and not for sale, although now

quite commonly, but wrongly, regarded as only a form of interest.

That land rent is an effect of monopoly has always been recognised, and the only course open to any one willing to be governed by scientific principles of classification should have been to regard monopoly gains as the general class of which land rent was only a species. But to the older economists the peculiarities of land rent were so obvious and the laws of monopoly so vaguely understood that they not only put land monopoly into a class by itself, exclusive of other monopolies, but also dignified it further by placing it among the four original productive factors. This of course left other monopolies out in the cold, which, as they were regarded as a very disreputable folk, seemed a proper enough place for them. Unquestionably many monopolies are tainted with fraud and oppression, but it does not follow from this that the incomes derived from them are merely transferred to the monopolists from those to whom they really belong without any change in their nature. There is of course in some cases a transference of value from one class of individuals to another, but, except in the transference by gift, theft, or gambling, the nature of the income changes with the character of the recipient. Suppose the bakers to maintain a mono-

poly by which the price of bread is doubled. The extra cost of bread is of course a loss of purchasing power to the consumer, and a deduction from real wages to the labourer, from real rent to the landlord, from real interest to the capitalist, and from real profit to all enterprisers who are not bakers, in proportion as they continue to consume bread. But to the bakers, while the capitalised value of their monopoly is a profit, their extra compensation is not interest, wages, or profit, or any combination of them, but is an income which arises from the control of a special advantage or opportunity. In other words, in its transfer to the bakers the income which would otherwise have come into being in the forms of rent, interest, profit, and wages, partly of each according to circumstances, actually appears in the form of rent alone. It is therefore created by special opportunity in exactly the same sense that interest arises from capital, wages from labour, or profit from enterprise. Its nature as income is unaffected by the coincident fact that the returns to capital, labour, and enterprise have been lessened. The total produced continuing the same, any lessening of either profits, wages, or interest is distributed among the other forms of income, but we do not on that account, for instance, consider an advance in wages as a kind of profit just because it has been obtained at

the expense of profit. In its transfer from the employer to the employee the income has changed its character from that of an unpredetermined residue to that of a predetermined cost.

We have said that the productive force opportunity has its origin in appropriation, and we now seem to contradict this assertion by affirming that the three subsidiary productive factors are sometimes transferable. And if so, opportunity may sometimes owe its origin to capital or labour; that is to say, opportunity may be made as well as found. This criticism would not affect our general line of argument, as we have founded our definition of Opportunity not on its origin but on its relations to the enterpriser. The validity of the criticism is however not so assured as it seems. When an opportunity is appropriated without any cost to the appropriator—such for instance as a patented idea—its capitalised value to him is an example of almost, if not quite, pure profit. If the act of appropriation has involved any sacrifice of effort or of accumulations, the value of the opportunity has arisen from capital and labor as well as from the assumption of responsibility involved in the act of appropriation. The employment of capital and labour to obtain the opportunity are merely conditions precedent to

its appropriation, that is to say that the value of the capital and labour sacrificed, or the purchasing power parted with, do not bear any proportion to the value of the opportunity obtained, except as they are necessarily less than it, or believed to be so. The element of appropriation therefore, or of getting something for nothing, is not only always present in the origin of opportunity but is also the real incentive to its acquisition.

We have not, except in a few instances, used the term "special opportunity" because it is really tautological—that is not a competitive advantage which is merely a facility open at all times to everybody. The very purport of the word is that others, or some others, are excluded from possessing it. More than this, enough must be excluded to leave an advantage to those possessing it, or nothing will be paid for its use. The tendency of all opportunities, except those limited by nature, is to become more and more common, and as they become more common, they lose their power to command a reward, and when they become so common that those possessing them have no advantage at all over marginal competitors in their special line of business, they disappear as opportunities to the extent that they were appropriated but remain as facilities of produc-

tion, usually of wider application and greater productivity of utility than they possessed as opportunities, and the increased product is distributed as real wages, real interest, and real profit, instead of accruing as rent. On this account some may find difficulty in conceiving opportunity as a productive force, at all, and there is an apparent anomaly in considering as a productive force, that whose decrease as an income producer leads to an increase in the product. The explanation lies in the comparison being made at the wrong period of the process. Excepting those instances where the many, already in possession of facilities, are robbed of them in order to confer them as opportunities upon a favoured few, the original seizure and exploitation of an opportunity involves an increase in the total product, as the new way has to compete with the old way and manifestly cannot supplant it otherwise. Those who first seize the opportunity naturally retain as much of the benefit as they can, but cannot keep it all for themselves, even when they have no competitors, unless the limitation of the monopolised facility for production, like land, is limited by nature and not subject to human influences. But even land is not strictly limited by nature, because not only can fresh land still be brought under culture, but because

also new and improved processes have an effect upon the "margin of culture." In what they succeed in retaining for themselves, the owners of opportunities necessarily restrict the amount of benefit accruing to society, inclusive of themselves. As others avail themselves of an opportunity, competition arises, and while the new industrial process increases as a facility, it loses in its characteristic of opportunity.

Now how does the income arising from the possession of such opportunities differ from the rent of the land? The differences are of course considerable, but the question is whether they are of a character to forbid our regarding the two incomes as species belonging to the same general class. According to the principles of classification we have assumed as correct, they must belong to the same general class because their similar relation to enterprise is necessarily fundamental. When the enterpriser assumes control over land, or other monopoly, either through appropriation, purchase, or lease, his object is always the same, namely to acquire necessary or special advantages in production. Surely all incomes due to advantages possessed belong to the same general class no matter how greatly they differ in permanency; and it would be difficult to point out any characteristic in which the rent of a farm differs from the rent

of a factory, not due to the special advantages afforded by the former being more permanent. In a static society, that is at any given moment of time, as the total amount of neither of them could be changed, are they not practically identical in character?

The old distinction between land and other forms of monopoly, of which so much has been made, is really of very little theoretic importance in this connection. Facilities furnished by nature are indeed absolute necessities to all production. We cannot produce wheat without land, but, for that matter, neither can we produce sound without air. Air is as truly necessary to the production of music as is land to the production of wheat. That land commands a rent is due to its limitations and not to its being a necessity. If we could plant our wheat in the air and force it to germinate floating, wheat lands would still command the same rentals if the aerial cultivation was the more expensive. Again if it cost us some other satisfaction to get all the air we desired, air would command a rental when furnished to us in the required condition. Advantage is essentially relative and is not made positive by becoming exclusive. To make it positive in any sense at all two things are essential. It must all be owned and controlled by one person or group of persons who refuse to

compete with each other, and its product must not only be absolutely essential to human life, but the amount required must be independent of cost. An unlimited demand, that is a demand at any price the buyer can pay, must meet a strictly limited supply. Land and land products are very far from meeting these conditions, essential to differentiating the income from land and the income arising from other opportunities, and when so differentiated it would be extortion rather than rent. So long as an additional demand for wheat can be satisfied at a slightly greater expense than the price of wheat as fixed by the use of the present facilities for producing it, the advantage possessed by the ownership of land is just as relative as that conferred by the possession of a factory. This can always be effected by intensifying culture if no new lands are available.

There is of course a valid distinction between articles obtainable only in larger quantities at increased cost and those at a cost per unit decreasing as the supply is enlarged, and a good many important economic truths are deducible from it. Theoretically however this distinction does not coincide with that between articles supplied from the land and those supplied by other facilities. The two are phases through which all commodities pass at certain stages of

supply. It is not only that in the early stages of land cultivation increase in the intensity of culture may increase the production per unit of capital and labour, and that there is a limit to the size of factories, and to the extension of business, beyond which the cost per unit of product is increased, but also the fact that the character of the tendencies which affect rent are dependent upon the present worth of the use to the enterpriser and not upon the circumstance of how readily articles for use can be supplied. It is enough that such articles cannot be immediately supplied and withdrawn as the demand for their use varies, to furnish the reason for the fact that fluctuations in the values of uses, or in other words rentals, are governed by a different class of tendencies from those governing the fluctuations of interest, the fluctuations of wages, or the fluctuations of profit and loss. The fact that the circumstances which subject different uses to these special fluctuations are not always the same (differing especially and mainly in the degree of their permanency) only enables us to divide things used into two or more sub-classes, but cannot justify the exclusion of any one of them from the genus "Opportunity."

A misconception similar to that we have already noticed, namely, that to "capitalise" any-

thing is to change its nature demands our attention here. This is, that as all investments in tools, fixed capital, and all forms of opportunity except the natural powers of the soil wear out with use, they must be regarded as articles of slow consumption and as only a sub-class of consumable goods. This is true so far as the selling price of such articles is concerned, and every well-regulated concern recognises this in its depreciation account. But the inference drawn from it that there are no special tendencies governing what must be paid for the use of such things is false. Two machines of the same cost and accomplishing the same results will command the same rent even when one will last twice as long as the other.

Put yourself in the place of an analytically-minded investor and note the considerations which determine his action. Suppose him to be contemplating the building of a machine which he expects to rent. After figuring the probable rental, he compares it, after allowing for running expenses, repairs, and deterioration, with the interest on its cost—on, that is, the total of wages and consumable goods he converts into "fixed capital." If he finds the probable net rental only 2% of the investment cost (*i. e.*, only equal to the prevalent rate of pure interest), he will certainly not make the investment. What

more will he demand? Why in the first place at least enough to keep the value of his investment intact. But this alone will not wholly satisfy him. He must have in addition enough more to cover the special risks attendant upon the initiation of any enterprise, and of putting his capital into an unchangeable form. If it turns out that his investment nets only 2%, he will certainly be unable to get any one to take it off his hands at cost, and will get nothing for the special risks he subjected himself to as its builder. Let us suppose that he finally gets a net rental amounting, after charges of maintenance and depreciation are paid, to 7%, which he regards as just satisfactory, or marginal. Of this, 2% would be pure interest and 5% something else. Let us now consider the case of a man contemplating the purchase of a farm which he proposes to rent. He would probably be satisfied with a net rental of 6%, namely 2% pure interest and 4% something else, as he would not have to undergo the initial risks of a builder. If they each borrowed the cost on bond and mortgage at 4%, the one would receive 3% and the other 2% annually from his venture, the risk of which would of course be largely transferred to the persons from whom they borrowed, entitling them to a profit in addition to pure interest. Now how does the economic charac-

ter of these two parties differ? As investors they are both entrepreneurs pure and simple, as none of their own capital is invested in their ventures. But because as an investor the landlord is an entrepreneur or enterpriser, there is no reason for considering the income he receives from his machine or farm not a rental. It certainly is such to the one who pays it to him. As an investor the landlord cannot figure out his profit or loss, until he has sold his farm. Then the difference between buying and selling price less the interest on his mortgage or his pure interest on the buying price, if he does not mortgage, is certainly an element of his profit. Is the extra percentage which he has received also such an item? It must be so considered if we look upon him simply as an investor. But does this change the nature of the payment to the one who pays rent? Manifestly not, and it is surely the point of view of the payer which is decisive as to the nature of the payment, because rental is a fixed charge the amount of which is determined by influences peculiar to that class of payments. But are we entitled to look upon the landlord simply as an investor? If instead of investing in fixed capital he put his money into a stock of commodities held for sale, his profit and loss would have been exactly the difference between cost and selling price

less interest charges. Why is an additional item included in the calculation when he invests his money in a farm instead of in a stock of saleable goods? It does not greatly matter perhaps what we call this additional item so long as we recognise the fact that it makes a difference between the two kinds of investment, for as has already been said, it is the nature of the payment to the enterpriser who makes it which determines its economic character. I am confident however that the correct view is that it is rental to the receiver as well as the payer because its fluctuations in amount are subject to influences peculiar to uses. If the investor buys a farm under the supposition that its selling price will not change, what he does is to accept a rental instead of a probable profit which he might make on an equal investment in a saleable commodity. He subjects his investment to a different class of influences because he considers the chances are that he will gain by so doing, but that does not change the character of what he actually receives and transform it into the nature of what he might have received instead.

We are now prepared to take up the investor in "fixed capital," the man who has machines to rent, and a very little consideration will show us that his case differs from that of the landlord only in one particular, namely that there is more

chance of new machines being built than of new farms being brought under culture. He takes more chances and must therefore secure a higher rental. But until these new machines are put to work, his income from those he rents is exactly the same in kind as that of the landlord, and his investment differs from a like investment in saleable goods in exactly the same way. The probability of more competition insures indeed the fact that the amount of the rental will in the long run be approximately governed by the cost of reproducing machines, but it does not insure this in the fluctuations of the rental about its normal medium. That is, the value of the use of the machine, and therefore the income from it, depends primarily upon the supply of and demand for it at the time, just as the rental of a farm does, and what will be paid for the privilege of using them will in each case be governed by the relative advantages conferred. In each case this relative advantage is decreased by additional machines and additional farms being created, but the fact that machines are more readily increased than farms, even in cases where farms cannot be increased at all, does not in the least change the fact that what the buyer pays for in each instance is a relative advantage in production. Ownership being an inherent part of the func-

tion of enterprise, the owner of the farm and the owner of the machine are necessarily enterprisers so far as they have submitted themselves to the risk of a change in the selling price of the farm or the machine. The retention of the farm and machine in the one case and the retention of the stock of saleable goods in the other subjects them to an interest charge which is a predetermined cost. The point wherein they differ is this, that this cost is compensated in the one case by an expected but unpredetermined residue, or a profit, and in the other by the value of a use or a predetermined rental. The enterpriser as such pays interest to take a chance; the landlord and the owner of "fixed capital" pay interest to obtain control of a use or privilege.

The principle of the law of diminishing returns applies to all special opportunities as well as to land, though its statement has to be somewhat modified. Each increment in the use of any special advantage, each "dose of capital and labor," lowers the productivity of the special advantage enjoyed per unit of the labour and capital engaged, until the point is reached where a further increment of such use would lessen the aggregate gain of the controller of the opportunity.

Neither is the diversity in productive power

peculiar to land facilities. We see something very much like it in the manufacturing industry considered as a whole. Factories in the same business differ greatly in productivity, the marginal one being that which it just pays to run rather than to abandon or dismantle.

The laws of land rent and of monopoly are treated exhaustively, and with great length and minuteness, in the literature of the subject, which does not need to be reviewed here. My purpose being supplementary, my mission is only to call attention to the fact that land rent is included in, and is only an instance of, the general law governing the using of all things, or, as I should prefer to call it, the law of opportunity, and that this manner of viewing the subject is the necessary corollary of the definition of the science here given, the position here claimed for the enterpriser, and the principles of classification adopted by us as a guide.

Theoretically it is easy enough to distinguish between enterprise and opportunity and between their rewards. In practice, however, we are confronted with the difficulty that we have no special term for the income arising from special advantage, but only such terms as rent, hire, and royalty, covering such special instances of such income as are, or could be, paid over by the user to the owner of the

opportunity; and we have no term at all for the income accruing from such an opportunity as a secret process, or exceptional personal ability, when it is owned and operated as it necessarily is by the same individual. As such an opportunity cannot be capitalised, and because the two are not differentiated in the mind of the recipient, we are accustomed to regard the income arising from it and from enterprise as homogeneous, and to speak of it, and to look upon it, as a profit—a very dangerous error because such a natural one. As the opportunity itself is a profit, it is easy to speak of the income from its undifferentiated use as also a profit. Just as in individualistic production the productive factors are not differentiated, because their influences are all focussed upon the same individual mind, so, in such cases, the productive factor opportunity is not differentiated from enterprise because the two influences are focused upon one intelligence, by which they are rarely considered separately. It is for this reason perhaps that the Risk Theory of Profit is repugnant to a good many thinkers. They consider, very rightly, that, though from its very nature there can be no set proportion between the actuarial value of, and the actual amount of reward for, any single responsibility assumed, that some such proportion should ex-

ist between the actuarial value, and the average of the actual rewards of risks assumed. Such proportions undoubtedly do exist, though we have very inadequate means of determining them statistically, but the average gains of individual enterprisers certainly fail to conform to any such proportions. Large average gains often accrue in ventures involving little actuarial risk and responsibility, and this fact is intuitively felt to be inconsistent with the theory. We have of course the explanation in what has been said above, namely that these disproportional gains are not, as is generally assumed, homogeneous as they appear in yearly incomes, and wholly of the nature of profit. They are the joint reward of enterprise and opportunity. The capitalised value of the seized opportunity is a profit of a nature hardly subject to average.

The distinction in these cases is further complicated, and made more subtle, by the fact that the seizure of the opportunity is itself an act of enterprise, and its capitalised value a profit. As in the cases supposed the value of the opportunity is not capitalized even in the mind of its appropriator, he makes no distinction at all between the value of the opportunity and the value of its use, such as is readily and always made when the opportunity is embodied in a material thing, such as land, or even in a clearly

defined right, such as a patent which can either be sold or rented out on royalty. The profit obtained by appropriation, whether it be a material thing, a legal right, or only a new idea, bears no proportion to the risk and responsibility involved in the act of appropriation, but that is due, not to the nature of the reward for the act, but to the absence of competition. It is only because competition exerts a controlling influence, that the average of the rewards of risk tends to be proportional to the actuarial value of the risks assumed. Profit is the unpredetermined residue after the claims of the three subsidiary factors are satisfied. The seizure of an opportunity, whether it be the appropriation of unoccupied land, or the first application of a valuable idea, does not necessarily imply any competition, any use of capital, or any but a very slight exercise of effort, or the possession of any other special advantage. In such cases there are practically no limits imposed by competition, or any claims of opportunity, capital, or labour to be satisfied; the whole product or almost the whole product is the residue and accrues to the enterpriser. The opportunity gained comes to the enterpriser as a profit, but is invested in, and retained as, the subsidiary productive factor opportunity, just as savings from wages or from rent, interest, or profits

necessarily become either individualistic or economic capital.

Defining the subsidiary factors in terms of their relation to enterprise also enables us to give a precise definition of "fixed capital," a term very loosely used, especially by those attempting to enumerate its items. The proper distinction between it and "circulating capital" is evidently that the latter includes all unsold consumable commodities together with all raw material in process—what things, in short, are held for a market or to be used as raw material of salable goods—while "fixed capital" includes all things held primarily for use, for, that is, the facilities they afford for producing other things, and therefore withdrawn from the market while in use. All objects that eventually become "fixed capital" remain "circulating capital" until they come into the possession of some one who retains them for use or to hire out, though strictly speaking of course neither "fixed capital" nor "circulating capital" are capital at all, but only what capital is invested in.

CHAPTER VIII

CAPITAL

CAPITAL is usually defined, somewhat indefinitely, as "Wealth productively employed," but there seems to be some difficulty in determining just what items of wealth are included in the category, or just what is meant by "productively employed." Of course the scientific usage of the term "wealth" must be confined to denoting the accumulation of material things, and I therefore pass by without further comment such as speak of his ability to work as the "labourer's capital," or of free institutions as the "nation's capital."

The definition is hopelessly defective, first in its assertion that capital consists of material things, whereas, as is shown elsewhere, it is only a fund of unexpended purchasing power—of, that is, claims on material things and on such rights or other immaterial things as have a selling price or market value; secondly, in its assertion that economic capital is restricted to

investment in material things, whereas capital can be invested in a patent right, for example, just as truly as in a stock of goods or in a farm or factory; thirdly, in its implication that capital is a purely economic term, for while it is true, that only a part of the claims on wealth and rights is economic capital, the excluded claims are either social or individualistic capital; and fourthly, in its implied assertion that individualistic and social capital is not productive.

The custom is so well established of treating enterprise, labour, capital, and land as the four productive factors, that it is perhaps hypercritical to call attention to the fact that neither of them can be a factor at all. It is the enterprisers, the laborers, the accumulators, and the discoverers and appropriators who do things, and they are therefore the true industrial factors. Harmless as the prevalent custom seems at first sight, a good deal of mental fogginess can be traced to it. Any one for instance who realised what the terms were really intended to express could hardly be guilty of supposing that "labour produces all things," or in other words, that the labourer is the only one who does anything—the only productive factor—with its connotation that he is therefore morally entitled to the whole product. Also, as we are about to show, the prevalent misconceptions as to the

nature of capital are directly traceable to treating it more or less unconsciously as an active force. And the same remark applies to the fourth productive factor, opportunity. In such a science as Economics we cannot be too exact in our use of terms. The exact definition of the four productive factors and their functions is not a very difficult matter to any one approaching the subject by examining into what must be done to produce anything—into what is essential to production. The moment we abandon the present habit of defining functions in terms of their factors, and adopt the principle that the factor must be defined in terms of the function exercised, all difficulties and ambiguities vanish.

The word "productive" has been, and is yet, used loosely. We have already noticed its improper employment as a synonym for "profitable." As every result is a product, strictly speaking, all wealth, even a hoard, is employed productively, either individualistically, economically, or socially, though the result or product is sometimes only a service. And the distinction between services and commodities is apparently the one sought by the use of the term "productive" in this connection, only if so "reproductive" is the term that should have been employed. The very nature of a service rendered to a person is that it cannot be sold again,

because it has no such material embodiment as will enable the recipient to transfer it to another. It lacks the power of persisting, is unsusceptible of being accumulated, and therefore cannot ever become a constituent of either capital or wealth, or a productive factor. Its purchasing power vanishes, or in other words is consumed, simultaneously with its production. Anything not consumed at the moment, which is nevertheless unintended for or incapable of exchange, can be accumulated and is therefore capital, but only individualistic or social capital. A hoard yields an individualistic income of satisfaction to a miser. On the other hand every commodity, produced for sale or to be retained for industrial use, immediately on its creation necessarily becomes a "capital good" and its purchasing power an item of the economic productive force, "capital."

It is this persistence of the value created which it is probably intended to connote by the use of the term "productively engaged." Or in other words it is sought to confine capital to wealth employed in the production of reproductive things, of things, that is, that continue capable of aiding in the creation of purchasing power, as saleable commodities do until they reach their final consumer, and as "fixed capital" does for a longer time, and until it is used up; and, more

or less unconsciously, to exclude wealth employed in rendering services to persons—that is wealth in personal use, such as clothing or a dwelling. If this is its real intention, the above definition of capital would appear to be inconsistent with the claim that all real estate improvements are capital, for shelter (the service rendered by a dwelling) is not itself capable of a productive use by the enterpriser, as is the case with all material products, not in possession of the final consumer. Services like shelter part with their exchangeability after the first exchange. Their value cannot persist, and can never become an item of either wealth or capital. On the other hand, the value of the use of a building employed as a factory or shop does persist and becomes incorporated in the value of the material product manufactured on the premises. According to this definition of capital, by those who would deny to land its position as a specific kind of productive factor, land should be considered capital when used as a farm, and not as capital when used as a park or for residence. All of these views involve us in insuperable difficulties. No one regards only those efforts as labour which are expended on the production of material commodities. Effort is still labour when rendering a personal service. Why should capital be treated differently, and

be supposed to become something else, when devoted to the production of services? Only one reason is possible; namely, because the income derived from service-rendering wealth is subject to different laws from those governing the income from other fixed capital, while the principles governing wages of service and the wages of "productive labour" are the same. But the principles governing the rent derived from a factory building or store are exactly the same as those governing the income derived from dwellings. The one cannot be capital and the other not.

Moreover if service-rendering wealth is neither capital nor land, what is it? It is certainly a producer of income, and therefore a productive factor. Must we consider it a fifth factor, alongside of the four previously recognised? Surely it is evident enough that the principles which should guide us in discriminating between the productive factors are not to be found in the character of the product, which is usually the joint result of all of them combined, but in the character of their incomes, which in its turn is wholly governed by their relations to their employer.

Employing the term "property" in its usual sense as including not only all material wealth but also all "property rights" or valuable priv-

ileges, such part of property is an embodiment of "capital" as is held for a market, and such part is an embodiment of "opportunity" as is held off the market and retained for the benefit of its use. We can, of course, if the phraseology be preferred, divide property into "circulating capital goods" and "fixed capital goods," though if we do we must depart from present custom so far as to consider "land," patent rights, goodwill, etc., as constituents of the latter category, and more important still we must entirely disabuse our minds of the idea that either kind of "capital goods" commands an income of interest. The use of this phraseology leads however away from the proper point of view. To the enterpriser employing both "circulating capital goods" and "fixed capital goods" the retention of the former is a cost for which he pays interest, whereas the retention of the latter is done for him by another, that is by his landlord, to whom the interest charge is a cost. Interest on capital embodied in facilities or "opportunity" is not therefore an element in the "cost of the product," while the interest on capital embodied in "circulating capital goods" is such an element of cost. This is a very important distinction and too apt to be lost sight of if we persist in regarding "opportunity" as only one form of capital embodiment. Doubt-

less it is that, but the change of embodiment has involved a change of function. And this change of function must be the overruling consideration in a science of functions such as Economics surely is. Property transformed by the enterpriser or in process of transformation into goods held for a market is capital, or rather "capital goods." Property used by him as a facility of production is "opportunity," or, if one prefers to retain the old phraseology, "land." This once perceived, all ambiguity as to what is and what is not economic capital vanishes, and I am not aware of any previous statement of the "capital concept" equally clear and precise, or founded upon principles which entitle us to demand assent.

To retain possession of what one makes or buys simply to sell again without utilising it in the meantime is to establish time relations. And for the ability to do this the enterpriser, as such, is forced to pay interest to the capitalist, as such, and this interest, whether paid to another, or earned by his own capital, is an element of the total cost to be finally compared with selling price to determine the profit or loss of any transaction. So also when the enterpriser buys outright any property for which he has to establish time relations, while using or renting it as a facility for production, whether such prop-

erty be a farm, water power, a factory, a tool, or an animal, the interest on his investment is also an element of the total cost to be finally compared, in determining his gain or loss, with the selling price of the facility when he finally parts with it, plus the rental obtained in the meantime.

But this interest is not an element of the cost of the product for the creation of which an enterpriser has secured the use of the special facility in question. The element contributed to cost by such facilities is the value of their use expressed in rent, hire, or royalty, as becomes at once evident when the enterpriser elects, not to purchase, but to rent or hire them. The nature of this cost is not changed by the fact that the enterpriser, as such, rents them from himself as a landlord or owner, any more than employing his own capital changes the nature of the interest on it. A farmer owning his farm must be considered as paying a rental to himself. The fact that he has borrowed money to buy it does not include the interest on the mortgage in his cost of production. This cost to him, as an enterpriser, is exactly the same—namely what the use of it is worth—whether the farm is owned free and clear, or mortgaged or rented. The crucial fact is that the individual enterpriser does not have to own the things in

which "fixed capital" is invested in order to retain control over them, and use them as an enterpriser, whereas his retaining the ownership of all saleable commodities in which "circulating capital" is invested is the very essence of his function of enterpriser. The product he must own, but as an enterpriser he cannot own the means.

The owner of land or "fixed capital" is himself an enterpriser and his property is a product or "capital good." To him the interest on his investment is an item of cost and the difference between that interest and the rental he obtains, or could have obtained if he had used it himself, is a profit. The interest on an investment therefore is an element of the cost of the property invested in, but not an element of the cost of the product obtained by the use of such property. It is what the use of the property is worth that is such an element of the cost, and this may be greater or less, though usually greater, than the interest on the investment.

Of course just in proportion as an investment in a certain kind of facility can be quickly and easily made by anybody, will the value of the use tend to approach the combined interest and profit on a like investment in consumable commodities—but that by no means identifies rent and interest. In paying interest what the en-

terpriser buys are the time relations it enables him to establish. In renting land, or hiring the privilege of using facilities for production, what he pays for are the opportunities and facilities afforded—that is, relations of advantage. The time relations essential to the utilisation of land or privileges primarily concern only another class of enterprisers, namely the owners of the "facilities," and not the special enterpriser who rents or hires them from the owners. The interest on an investment in productive facilities is a cost to the owner only. To the user the cost is not the interest on the investment, but the rent, hire, or royalty the facility commands.

Whatever else may be found lacking in the principles upon which this treatise is founded, they certainly seem to aid in clearing up any confusion of thought on the subject of capital. Our definition of the science at once tells us that an accumulation of material things created, or appropriated and retained, by its owner for his own convenience or use, or to be hereafter consumed by himself and those dependent upon him, is an embodiment of individualistic capital, or opportunity, according as it is to be used up or used, whether that accumulation is represented by the barrel of flour in his cellar, or by the dwelling in which he lives. Social capital and opportunity are again embodied in

the material possessions of the state intended to secure social products, whether such products are services, as they commonly are, or commodities not produced for sale, but for free distribution among the people. Economic capital therefore is the purchasing power embodied in all remaining material objects held for a market—except possibly actual money, a subject which will be considered later—because every such object is either held for sale or to be used up as raw material in the production of saleable services or commodities. All consumable wealth is embodied capital, even a hoard, as that renders a service of satisfaction, or of assurance, to its possessor, but only such wealth is an economic embodiment of capital as is held for exchange. Such wealth as is held for use, or to be rented, is not capital while so held, though it can sometimes be reconverted into individualistic capital by devoting it to consumption instead of use, or into economic capital by putting it on the market.

This view, as to what constitutes economic capital, is obtainable as a corollary of our definition of enterprise. In accordance with the principles of classification set forth, Capital, being a subsidiary productive factor, must be differentiated by its relation to Enterprise. The general class here is "the means needed by

the enterpriser," and we must therefore distinguish the different kinds of means, according to our principles of classification, by the different purposes the enterpriser has in employing them. Why does the enterpriser, as such, desire the control of capital, and why will he pay something for this control? Simply to enable him to hold his product either for rent or for market. Land or any other facility for production is itself his product to its owner, but so long as he devotes it to being used, either by himself or by another to whom he rents it, it is withdrawn from the market and no longer an embodiment of "circulating capital," thus affording another exemplification of the principle that it is not the productive factors, but the productive functions which are fundamental.

If all material commodities, like services, were consumed simultaneously with their production, there would cease to be any work for capital to do. The function of "capital," is to preserve values during the period of the transformation of raw material into its final form, and until the finished product reaches the final consumer or while a thing is withheld from the market to be used as a facility of production. What the enterpriser buys therefore, when he pays interest, is a time relation. But it is not a time relation, but a use or opportunity which

he secures when he rents a farm or factory. The one who has to pay for the time relations involved is the owner of the farm or factory. A relation of time is indeed connoted, but, as we have clearly seen, what the enterpriser, who rents or hires, buys is the result of the time relation, and not the power of instituting the relation itself.

The enterpriser's demand for capital, in any given state of the arts and of population, is strictly limited. If, for the conveniences of the argument, we suppose wholesale prices to be those for which goods could be bought if taken from the factory as fast as they were produced, the difference between wholesale and retail prices can be no greater than what the consuming public is willing to pay for the convenience to themselves (that is the time, trouble, and interest they save) in having available stocks on hand, from which such goods as are desired can be quickly and easily selected as wanted, If anything occurs to double the quantity of goods in stock, and the public should continue to take them at the old rate and at the old prices, the enterprisers who carry the stock, be they first hands, jobbers, or retailers, get only the same difference between initial cost and selling price as before, and on the same amount of sales, but the expenses for interest, insur-

ance, and care are just twice as great. Now how does the individual enterpriser meet a contingency of this character when it arises, as it periodically does? In two ways: he sacrifices his stock and lessens his production.

Now it is easy to say that, as the supply of commodities constitutes the effective demand for commodities, there cannot be any such thing as a general glut, and that therefore the whole class of enterprisers, taken together, cannot, as a body, find themselves in the situation depicted. The unfortunate enterpriser is simply suffering from his own lack of foresight, has misjudged his market, and produced the wrong things. If he had diverted enough of the capital he borrowed to other occupations, and in good time, he would not have been forced to sacrifice his goods, or lessen his productive activity. Even if it be granted that, if no mistakes were made in production, demand would always equal supply, that by no means proves, as seems to be generally supposed, that the aggregate amount of unsold commodities cannot be a very variable quantity, for mistakes are made and many of them are unavoidable by human prescience, and it is certain that more of them are made at some periods than at others. And if at any time the total amount of unsold goods is unusually

great, it must affect the average of profit unfavourably, and lead to some cessation of production, or in other words to a period of industrial stagnation, which will necessarily continue until consumption as a whole has caught up with the lessened production on the whole, and the misfits have found purchasers at some price.

Though I have never seen it distinctly stated, the argument against the possibility of a general glut contains the implied assertion that the effectual demand withdrawn from the "misfits" is transferred intact to other commodities, and especially to those which happen to be relatively the scarcest. This is true, to the extent that the value of such articles will rise as compared with the value of the misfits, but not true in the sense that more of such articles will be effectually demanded than before. Nor is it true that the existence of unsaleable commodities will raise the price of saleable commodities. Articles withdrawn from the market, or held at a price buyers will not pay, are virtually subtracted from both supply and demand. Misfits are always so withheld or they would not accumulate. The proportion of supply and demand remains for other articles just what obtained before, and there is no way therefore in which an effectual demand for more of these other articles can arise.

The accumulation of misfits therefore cannot lead to any corresponding diminution in the stock of other commodities.

It is of course an unquestioned proposition that a supply entirely composed of suitable things, and in the right proportion, constitutes an efficient demand for itself. But the corollary that is universally drawn, that the maladjustment of supply to demand is always found in the character of the supply, is false. The recognition of capital as a subsidiary factor, and looking to its relation to enterprise for its distinguishing characteristics, shows us that the much more important cause of the maladjustment of supply to demand is to be found in the character of the demand; and that, consequently, the demand for commodities being what it periodically is, no prescience on the part of enterprisers could enable them to fit supply to it, because a certain part of the effective demand is for a kind of thing that cannot be produced at all.

To obtain the necessary data for considering this proposition, we have to enter the individualistic domain, for in the last analysis demand is exercised by the individual, and all Economics has to do with it is to notice how the extent and character of the demand influence supply, or, in other words, how consumption affects production. Men combine to produce but do not

combine to consume. Now what does an individual living within his income do with it? Part he consumes, and that of course constitutes a demand for commodities. Another part he saves and invests, or loans, and this part may or may not exert a demand for commodities. The point overlooked is that this part of his demand is for retention and not for consumption. Somewhere in the world, for every dollar saved and not invested in "fixed capital" there is an addition to "circulating capital" of an unsold commodity worth a dollar. The world's stock of unsold commodities, or in other words the gross amount of "capital goods," grows yearly by the exact amount of the world's net savings, less amounts invested during the year in tools and machinery, and other forms of "fixed capital." The demand for investment is therefore a demand for commodities that shall not be consumed, but that shall be retained for use, or held for a market at cost of reproduction inclusive of a normal profit. Now so long as these retained commodities take a form in which the enterpriser can use them with profit as tools, well and good. But when the supply is greater than this, it necessarily goes to augment the stock of unsold consumable goods, which as necessarily are "misfits," whether or no they are "suitable goods," and whether or no they are supplied

in the same proportion as the demand for consumable goods, which by our supposition is less than the supply of consumable goods in total amount; and, as we have seen, an increase in the stock they have to carry means a decline in the gains of enterprisers, which forces a lowering of the general average of profit, and a consequent decrease in production.

Now what can enterprisers do, by varying the character of the supply, to protect themselves against this attack of the saving classes upon their chance of profit? The demand being for accumulated things, they are forced to produce more things than they sell, so long as they continue producing at the old rate. They escape of course to the extent in which they are able to engage in new industries, which absorb a certain amount of capital for plant, raw material, and stocks of finished goods. This expedient however serves more to prolong good times than to shorten hard times, as it is mostly in good times that new ventures tempt enterprisers. Manifestly investment in additional machinery will not be made when the product of present machinery is unsaleable. Another avenue of escape can be found in substituting machinery for labour, or by substituting a process requiring less labour and more capital for one employing more labour and less capital. These

two methods, the only expedients by means of which the field for investment is widened, are however only made available by advances in the state of the arts, which are acts of co-ordination not necessarily included in their peculiar function, and not primarily under their control, and for which enterprisers are only responsible as encouragers and adopters. But all efforts, however intelligently directed, to supply an investment outlet for accumulations, without impairing profits, are necessarily only palliative, if the accumulation of capital progresses faster than population increases and the state of the arts advances, that is faster than the field for investment widens.

Of course this maladjustment of supply and demand due to the character of the demand is only temporary. The trouble is in the means by which re-adjustment is finally effected, namely by the slackened employment of labour, and the absolute loss of all that could have been produced by the idle capital and labour force. The remedy is however effective. As expenditure is never cut down to the full extent in which income is curtailed, the accumulation of capital is necessarily lessened by industrial inactivity and in extreme cases the fund of pre-existing capital may be impaired.

As the enterprisers, as such, are in actual pos-

session of all existing "capital goods," the losses incident to a supply of capital, in excess of the amount that can be employed at a satisfactory profit, fall primarily on them. It is, I think, commonly supposed that they are able to shift the whole or part of this loss upon the capitalists by refusing to pay the same rate of interest as before. The inadequacy of any such computation is manifest when it is noted that the prices of an enterpriser's stock on hand often decline as much as thirty per cent. as compared with the cost of reproduction; whereas his possible saving in interest charges cannot be greater than two per cent., as that is about the rate of pure interest. It is however difficult to see how they are able to effect even this saving so long as they continue to produce at the old rate.

We can turn the tables upon those who will not admit the possibility of a general glut, by reminding them that the supply of capital is the demand for capital in exactly the same sense that the supply of commodities constitutes the demand for commodities, except that the equality of the supply of and demand for capital is not affected by the suitability of the supply to the demand, as is the case with the supply of and demand for commodities. By the necessity of the case, as "capital goods" before the final consumers buy them can be trans-

ferred by one enterpriser only to another enterpriser, a condition of equality always obtains between the amount of "capital goods" that exists, and the amount of capital the enterprisers, as a body, must have, or borrow. How then is any change in the rate of interest brought about? This however is a matter we are not as yet prepared to discuss, and which must be deferred until the subject of "Loanable Funds" is treated.

The enterpriser does obtain some temporary, though almost inappreciable, relief in times of industrial stagnation, through a decline in the rate of interest. The relief however does not arise from enterprisers as a class being able to add all the reduction in interest charges to their profits, as the reduced income of the capitalist class lessens their demand for consumable commodities so that, to the extent that this occurs, what enterprisers save in interest charges is sooner or later deducted from the prices of their remaining commodities. To what extent final relief is afforded depends wholly upon how the consumption of capitalists is affected by the reduction in their income. If they reduce their expenditures, and save as much as before, no relief at all is obtained. To the extent however that their curtailment is in savings, the relative demand for consumption is increased and the

further increase of capital is checked. This however will not of itself better the situation of the enterpriser, but will only prevent it from becoming worse. If however the living expenses of the capitalists trench upon their former possessions, the oversupply of capital is to that extent reduced.

In the application of economic theory to practical problems, the tacit assumption has always been made that the demand for capital would be unlimited if it were obtainable without an interest charge. The fallacy of this assumption becomes self-evident from the standpoint here advocated. Enterprisers are the only real borrowers of capital, as the spendthrift, or borrower for consumption, is really only consuming his own capital. If enterprisers could borrow without paying interest, they could of course utilise an additional amount of capital to advantage, but would inevitably reach a position in which this would no longer be possible, and then they would certainly refuse to undertake enterprises requiring further accommodations. This point would be reached for each of them as he found himself in possession of a stock of consumable commodities, unsaleable despite the saving in interest at the cost of reproduction, inclusive of a satisfactory profit for himself. And this is as true of the group

as of the individual enterpriser so long as it is granted, as it must be, that the aggregate of such unsaleable commodities varies, increasing and decreasing with the sum-total of accumulations as compared with the field for investment.

In dull times enterprisers also endeavour to avoid the cessation of production by lowering money wages. This expedient, undoubtedly effective to the individual enterpriser, or to any special class of enterprisers when they can confine it to themselves, is of more doubtful use to the class in general. If it leads to a corresponding decrease in consumption, nothing at all is gained, as it is only when labourers, are forced to suspend saving, or to expend part of what they have laid by for a rainy day, that the maladjustment of capital to its profitable use is in some degree rectified. What enterprisers pay for the use of opportunity is also reduced in bad times, but manifestly this reduction, as is the case with reductions in interest and wages, is helpful only as it leads to the relative increase of consumption as compared with income and production.

As all these reductions in what enterprisers pay to the subsidiary factors lead to some decrease in consumption, the decrease in production and the intrenchment upon savings (unless

of course the field for investment has been unexpectedly widened) must not only be sufficient to wipe out the excess of capital at the time enterprisers commenced curtailment, but must also be sufficient to offset any decrease of total consumption that occurs during the period of re-adjustment. If no curtailment of accumulation results, the lowering of rents, interest, and wages is a positive disadvantage to the enterprisers, because their market is continuously narrowed, which, to the extent it reduces the amount of capital required, intensifies the disproportion between the supply of capital and the uses to which it can be profitably put.

One, and perhaps the principal, reason why the connection between accumulation and the periodicity of industrial activity has been so generally overlooked, and even specifically denied, is the much more apparent connection between this periodicity and abundant crops. This latter connection is of course indisputably established by observation—an unquestioned inductive result. We have here a good illustration of the tendency of inductive logicians to rest satisfied with the establishment of a fact. It is enough for them that poor crops are the cause of bad times in the sense of preceding them ; *i. e.*, poor crops are the first term of the sequence. They of course do not ignore

the existence of an active cause, but having nothing but observation to rely upon for its discovery, they are satisfied with the most prominent reason that presents itself. This most prominent reason is that when crops fail there is less to divide among producers. There is of course no doubt of this being true, but how does it explain the consequent reduction in the employment of labourers? We have here a striking example of the danger of reasoning from an inductive premise when a deductive premise is obtainable. The logical process, whose results are yet accepted by the great body of economists, is as follows: Crop failure has resulted in an impairment of capital, and as the lessened employment of labour is a coincident fact, the two must be related, the first as cause, the second as effect. Therefore "capital employs labour" and there must be such a thing as a "wages fund" which varies in amount with the amount of capital in existence; the more capital the more employment. This final result, logically as it has been deduced, has been one of the standing puzzles of the science, about which disputants are as far as ever from agreeing. Likewise they have been led into, and are yet sticking in, all sorts of bogs by the previous assumption that "capital employs labour." Certainly capitalists, as

such, do not employ labour. Neither can "capital goods" or "capital considered as a fund" employ labour, for capital however considered is not a person, and to employ is a personal act. As to the "wages fund" itself, no one has ever been able to determine what part or proportion of existing capital it is. Neither do any two investigators agree exactly as to what things are capital or capital goods and what things are not. The vagueness and ambiguity of these conceptions has made it impossible to determine what it is that decides the employment of labour. Consequently no one has ever even attempted to trace the influences at work thoroughly and exactly, and some in despair have denied the existence of any "wages fund" at all.

The theory of the Productive Process here advanced does answer this question definitely and intelligently. It shows that there is such a thing as a "wages fund" in the sense that at any given time the sum that will be expended in wages in the near future is predetermined by business conditions at the time—that is upon the rate of profit then obtaining. The rate of profit in its turn depends upon the ratio of capital to the field for its profitable investment. Instead of what is now almost invariably assumed, "the more capital, the greater the wages

fund," just the opposite is found to be the truth. The more capital in excess of what the field for profitable investment can absorb, the less will be expended in wages in the near future. The field for investment remaining the same the more capital the smaller the wages fund.

Now those determined not to accept our theories will hasten to ask: How is it that the depletion of capital due to crop failure lessens the employment of labour? The answer should be obvious; namely that crop failure narrows the field for investment even more than it depletes capital.

Agricultural, mining, and fishing industries differ from all others in the very important particular that the output of the same amount of productive energy varies greatly in different years. When crops are poorer than usual, unless of course when importations of food and raw products interfere, the prices of agricultural products advance, so that the farming community is about as well off as before, and sometimes better off—except of course to the extent in which they are consumers of their own products. All consumers of farm products suffer an impairment in the purchasing power of their incomes exactly equal to the increased cost of food and raw products. As they must spend more for these, they have less to spend for other

commodities. The producers of these other commodities cannot sell as many of them, and consequently the enterprisers cannot advantageously employ as much capital as before. Mills, factories, and workshops are idle and there is no outlet for circulating capital by converting it into fixed forms. The field for investment is restricted and much existing capital, especially that in fixed forms, is useless until industry revives. Capital, which was not perhaps superabundant before, finds itself suddenly pushing hard upon its limitations. Profits disappear and workmen are discharged. But this is not because capital has been depleted, but in spite of its depletion, and because the uses for capital have narrowed to a greater degree.

I have so far said nothing of panics as distinguished from industrial depressions because what differences exist are not at all due to any variation of the fundamental principles which it has been our task to elucidate. But while the action of these forces in panics is not abnormal, it is, as it were, explosive. It must never be forgotten in the application of economic principles to practical matters that economic forces are volitional. They therefore only come into action as men's perceptions and conceptions change. So long as confidence prevails that the stocks on hand of unsold goods can be eventually

disposed of above the cost of reproduction, "capital goods" can be accumulated far beyond the amount that can really be so disposed of. The more however such an accumulation has exceeded the real demand for consumption, the more dangerous has the situation become. If the perception that this state of affairs is being approached is gradual, one after another the more prudent enterprisers restrict their operations, and though a period of gradually falling prices and of industrial depression sets in there may be no panic. But when some unforeseen circumstance, especially the failure of some great banks and leading firms of unsuspected credit, destroys this general confidence suddenly, a general rush to unload the stocks of unsold goods occurs at the same time that the difficulty of so doing is increased. The retailer stops buying of the jobber, the jobber of the wholesaler, and the wholesaler of the original producers. The whole tendency of this process is to throw the burden of accumulation upon "first hands." Very shortly the general average of income is affected and the consumers despite being forced to spend a larger proportion of their income buy less and less of the retailers. And so the circle is travelled round and round, until the stocks of goods on hand are so reduced that prices again rise beyond the cost of reproduc-

tion, when confidence is again restored and enterprisers, at first cautiously and tentatively but with growing boldness, extend their operations. The stream of products has its periods of spring freshets and of low water, and confidence is the dam which, when it breaks away, precipitates a flood of unsaleable goods upon an already overflowed market. But the breaking of the dam could not occur, or if it should occur would be harmless, if there were no accumulation behind it and pressing upon it.

Among a backward and unprogressive people, especially when property is not secure, only a great expectation of profit will tempt enterprisers, and the rate of "normal profit" (if the term may here be allowed) will be very high. At the same time the normal rate of pure interest will be very low, as is shown by the fact that the wealth of such countries is so largely hoarded, a proof that the proportion of those willing to accumulate without any inducement of interest is large. We have here an explanation of poor countries investing so much of their savings in jewelry and precious stones, or in hoards of the precious metals. Market, or gross, interest is to be sure high, but that is because it is mainly, or perhaps wholly, insurance, and not pure interest. We speak of such a people as unenterprising, and

very rightly; for enterprise is so hampered that it cannot extend the field for investment at all, and the pressure of accumulation upon its limitations is constant, because the field for investment is so narrow, and the normal expectation of profit so high. Such a people, possessing perhaps great natural resources in fertile lands and mineral deposits, affords a fine field for exploitation by more enterprising nations, in which they can employ their surplus capital, and thus relieve the home rate of profit from the pressure which, if unrelieved, would certainly cause more or less decline of industrial efforts at home. Such foreign investments are however rarely, if ever, made unless the home government is able to extend an influence over the exploited country that assures to its visitors a greater security than native enterprisers formerly enjoyed, notwithstanding the fact that they already possess the enormous advantages over native competitors conferred by their higher civilization. The real advantage to a nation of possessing colonies is to be found, not so much in the statistics of exports and imports and the profit thereon, as in the extension of the "field for investment." If the funds thus invested abroad had been kept at home, little or none of them would have been added to the capital fund of the nation, as

unless this field for their profitable employment had been afforded they would never have been accumulated at all, or indeed produced. They are therefore wholly an addition to the possible wealth of the investing nation, and the creation of productive forces that would otherwise never have been brought into action.

On the other hand, it is of advantage to a backward people to be exploited by their richer and more civilised neighbours, if they have arrived at a state in which the limit of accumulation has been reached. It would indeed be greatly more advantageous to accumulate their own capital, and make room for it by developing home enterprise. This could readily and rapidly be accomplished, if they were so determined upon it as to improve social and political conditions and adopt modern methods, by the employment of labour otherwise wasted in idleness and by bad methods, as is now being illustrated in the case of Japan. A somewhat slower industrial development might well be more than compensated for by the greater share in the resulting benefit obtained. But when native initiative cannot be trusted to bring about such a change in native habits and conditions, the introduction of foreign enterprise and capital is beneficial in many direct ways, due principally to the action of the law of

residual wages, and indirectly in improving moral and social standards, especially affecting the security of life and property, and raising the individual standard of life, and also, through diversity of employment, increasing the proportion of skilled labourers, as is now being exemplified in Egypt.

Of course the decline in interest due to any decline in profits, by lessening its desirability, has a tendency to check accumulation. Economists seem to be content with this as the only law regulating accumulation, though it is inconceivable that this cause could work quickly enough to re-adjust the supply of capital to the effectual demand of enterprisers automatically. But the other more important and more quickly acting influences, which have just been stated, are quite generally overlooked. The influence upon accumulation of fluctuations in the inducement to save is very slight, while that of difficulty in the ability to save is very great.

Interest is by no means the only inducement to save. To assure ourselves against poverty in our declining years, or against a loss in earning power, or against unforeseen circumstances, or to provide our children with a start in life, are all motives to save, strengthened rather than weakened by a decline in the rate of interest; and if they should persistently lead to an

accumulation in excess of the capital for which enterprisers could find profitable employment, pure interest would eventually disappear. Gross, or market, interest might still be paid for loans, but it would really be all a premium of insurance and would contain no element of pure interest. But as the savings from these causes never have been, and undoubtedly never will be, sufficient to accomplish this in prosperous and progressive communities, the rate of pure interest will be determined by the marginal savers among those who are induced to save by the desire of obtaining an income of interest. Nevertheless the size of the first class of savers has a very pronounced influence upon the rate of pure interest, for the larger their accumulations the sooner will the marginal saver of the other class be reached, and the lower the prevailing rate of pure interest will be.

The characteristic of savers, which is most important in this connection, is this: That it is the habit of all consumers to keep pretty close to the standard of living they have once adopted. As men prosper their standard will be raised, but it will be raised gradually, except perhaps in cases of unexpected inheritance. In years when income is below the average, some economy is practised, but the reduction of expenditure is always less than the reduction in

income. And when incomes are unexpectedly large, additional expenditure very rarely eats up all, or even the greater part, of the increase. A person who saves little or nothing during his eras of good fortune is looked upon as a reckless fool. More than this there is a marked tendency among men to adopt a standard of living very close to income, when the income is an assured one. Families living wholly on incomes derived from permanent investments seldom add much to their accumulations, unless perhaps we should except the very rich, and those whose property is in real estate situated where the value of real property is rapidly appreciating. In proportion to its average amount, the more variable and uncertain an income, the more, as a rule, will be saved from it in the long run, and it follows, therefore, that profit being much the more variable form of income, must yield the largest proportion for accumulation. And, as a matter of fact, nearly all great fortunes have originated mainly from profit, especially from profits obtained through the appropriation of opportunities. But the savings from profit are not only proportionally great, but are also exceptionally spasmodic. The point of the argument is this: that the regulation of accumulation, and the re-adjustment of capital when superabundant,

do not depend so much upon the will, as upon the ability. More is added to capital in good than in hard times, not because men are more anxious, but because they are more able to save. The corrective, therefore, acts automatically, but it is somewhat retarded in its action by the fact that enterprisers, being more sanguine in good times, search more eagerly for new employments, thus widening the field for investment and absorbing accumulated savings and postponing the time when capital becomes redundant, and the slackening of enterprise when times are hard, by discouraging investment in fixed forms, correspondingly retards recovery.

The writer remembers that in his youth the stock editorial treating of hard times always attributed them to previous extravagance and impairment of capital, ignoring the facts that in such times there appeared to be a glut of almost every kind of consumable goods, that many factories were idle, that the rate of interest was low, and business failures prevalent, showing of course a decline in profits, all of which circumstances are irreconcilable with an impaired capital. At present we do not often chance upon similarly absurd statements, so contradictory to the most casually observed facts, but I fear that economists, as a rule, yet

consider the congestion of commodities in times of stagnation as due to the character of the supply rather than to the character of the demand. That the true explanation is to be found in demand becomes self-evident, when we consider the matter from the standpoint of the enterpriser, thus affording another example of its being the only one from which economic phenomena can be clearly perceived and properly grouped. The supply of commodities is of course the demand for them, but when part of the demand only is for consumption and the other part for retention, it is evident that an additional accumulation, exactly equal to the latter demand, must result and can theoretically proceed to a point where more of each kind of commodity is accumulated than enterprisers can profitably invest in "fixed" forms, that is in things to be used and not consumed in production, or add to their stocks in trade, until there has been a growth of population, or a widening of the field for investment, necessarily slow processes, which enterprisers cannot afford to wait for. When we have once recognised the enterpriser's necessities as paramount, we cannot fail to perceive that he is periodically forced to create a situation in which further accumulation will be checked, and in which sometimes

pre-existing accumulations will be somewhat impaired.

I may be pardoned in this connection for calling attention to the above argument as emphasising the fact, elsewhere claimed, that the subsidiary productive factors have no direct relation with each other—such inter-relations as exist being always indirectly set up through enterprise. Any change in the amount of any one of the three factors, or in the amount of the reward obtainable from it, must first affect profits, and the consequent change in profits and enterprise will then transmit the influence to the other two subsidiary factors. If capital really employed labour, as is so often asserted to be the case, the more capital the more employment; but as it is the enterpriser who employs labour, the true statement is, the more enterprise the more employment. It is when profits are large that enterprisers bid eagerly for labour, but profits are only high when finished goods are in active demand and bringing high prices, which cannot be the case when the amount of finished goods carried in stock by merchants, and goods in process in the hands of the manufacturers, are relatively large—which is to say when the aggregate of "circulating capital" is greater than usual.

The theory here advanced, as to the func-

tions of capital and the limitations to its accumulation, are not in accord with commonly accepted views, and the persistence with which the theory of a general glut keeps bobbing up has been a subject of amusement to well-regulated economists, and it must be confessed that it has not always been supported by very lucid or convincing arguments. The theory is of course unassailable that the supply of commodities is exactly what constitutes the effectual demand for commodities, and that, if any commodities are unsaleable, it is not because the purchasing power necessary to obtain them is lacking, but because they are not the commodities wanted, by those who possess the necessary power to purchase. This theory however, while not at all inconsistent with the existence of periods of industrial stagnation, fails to explain them. Why it is that at certain periods there appear to be so many more unsaleable misfits than at others, and how such maladjustment is rectified, are questions that economists have hardly attempted to answer, but which we are inevitably led to inquire into when we have once adopted enterprise as the standpoint from which to view the field of Economics, with the somewhat astonishing results that a general glut becomes a theoretic possibility, and that capital can be temporarily redundant

in the sense of being of greater amount than enterprisers can find an immediately profitable use for.

I hope no one will pervert my meaning by claiming that the logical result of this theory of the periodic pressure of accumulation upon its limitations would be the discouragement of saving and frugality. On the contrary it seems to the writer that, within certain limits not likely to be transgressed, the greater this pressure in any community the more rapidly will not only its aggregate wealth, but also its yearly aggregate of income increase. The limits to accumulation are elastic and they are stretched a little further by each recurrent pressure, so that, at the end of each cycle of activity and stagnation, the community finds itself in possession of a greater amount of capital per capita that enterprisers are able to find a profitable use for. Without this recurrent pressure progress would cease, and has ceased for some peoples for lack of it. All our theory points out is that a price has to be paid for the ultimate benefit in the loss of productive force during the period of readjustment—a loss the reality of which we have recurrent evidence of, but which is not satisfactorily explained by the present conception of the Productive Process.

The standpoint of enterprise also affords us some insight into the theory of interest. When an individual loans his capital to an enterpriser on ample security, what is it he foregoes? If he keeps it himself he will be forced to perform the function of enterpriser as well as the function of capitalist. If he decides to make the loan, he abdicates the former function to one who is supposedly more efficient as an enterpriser, and for that reason is willing to pay him more than, all things considered, he could obtain by retaining the responsibilities of production. But the assumption of responsibility implies the possibility of loss as well as of gain, and the less confidence a capitalist has in his ability to employ capital successfully, and the less inclination he has to lead an active business life, the more willing he will be to loan his capital to another. There is even a class of capitalists, composed of those who are aware of their inability to engage in business for themselves with any prospect of success, or who are incapacitated by sex or as minors or by ill health, who, rather than employ their own capital, would, if it were necessary, pay others something for keeping their wealth intact. The amount they would pay would of course be limited by the natural risk of deterioration and the risk and expenses attendant

upon retaining their wealth as a hoard. There is also another class, namely trustees, who are limited by law as to the character of their investments, and to whom security is the main object, to attain which all interest would be foregone, if that were absolutely necessary. Above these there are of course all grades of loaners until we come to the marginal loaner, who is hesitating whether to loan his capital at the prevailing rate of interest, or to employ it in his own undertakings. Now when confidence in the future is prevalent, hopes are high, and the spirit of enterprise is abroad, the marginal loaner will evidently incline to keep his capital and employ it himself, unless he can obtain more interest than would have previously been satisfactory to him. But if his chances as an enterpriser have been improved, so have the chances of those who are yet better enterprisers than he, and they will be willing to pay him more than before for the control of his capital, and the rate of interest will rise. And the contrary will happen when the business outlook is less promising than it has been. The marginal loaner, on whose decision the rate of interest depends, need not of course be a single person, or a single class of persons. The greater number of capitalists employ a part of their capital themselves, and lend a

part of it to others, and the proportions into which they divide their capital between themselves and others is the real determinant of the rate of interest. So while, as we have already seen, the supply of capital exactly constitutes the demand for capital, the supply of capital its owners do not wish to employ themselves, that is, what is commonly spoken of as "loanable funds," can vary from the demand for loanable funds, at the rate of interest obtaining at the time.

When the enterpriser sells a commodity to the final consumer, the commodity in passing from his hands ceases to be an embodiment of economic capital, though it may persist for a while as individualistic capital goods before disappearing altogether. The total amount of economic capital is increased by whatever enterprisers produce and decreased by the exact value of the commodities that the consumers have acquired. The amount of capital and the amount of capital goods always coincide, because, though capital is not an aggregate of capital goods, it is the aggregate of their power to purchase. In return for the capital destroyed, the enterpriser receives indeed either another pre-existing commodity, or some sort of a claim on commodities in general, either as money or balance in bank or

cancelling of indebtedness, but the transaction taken by itself involves a destruction of economic capital exactly equal to the value of the final consumer's purchase. It is through this process that capital is continually disappearing. If the final consumer does not come forward to absorb capital goods as fast as they are created by enterprise, accumulation of course results, and the greater the accumulation the less the incentive to the enterpriser to continue his production. He will prefer to loan rather than to employ part at least of what the final consumer has paid him, or, what is the same in effect, he will apply his receipts to lessening his indebtedness rather than in the employment of labourers. The marginal loaner will be repaid and will not be able to find a borrower who will pay his marginal rate of interest, and will therefore be obliged to keep his capital and to assume the responsibility of its employment. He is forced therefore to change his position from that of marginal loaner to that of marginal enterpriser, and other capitalists, willing to accept a lower rate of interest, will become the marginal ones. This decrease in the supply of and demand for loanable funds always manifests itself in a coincident decrease of both the deposits and loans of banks.

The amount of economic capital which enter-

prisers must either own or borrow is then always exactly equal to the amount of unsold commodities, and the amount of loanable funds exactly equal to the amount which enterprisers are forced to borrow at some rate of interest, which rate fluctuates with the varying proportion in which individual capitalists are willing to act as enterprisers also. There is, however, a notable complication, furnished by money, by which is here meant gold, silver, bank-notes, and government notes, or in other words the currency. If we consider the enterpriser employing his own capital as borrowing from himself, the supply of loanable funds consists of all the saleable goods of a country plus its circulating medium; and the demand for loanable funds, of all the saleable goods plus the currency the people elect to keep in their tills and pockets for their own convenience, and the amount the banks desire as a reserve fund. When bank loans decrease it is because certain marginal loaners have been driven into the position of marginal enterprisers, and therefore a smaller sum is required for bank reserves, at the same time that a larger sum of the circulating medium accumulates in the banks, owing to the fact that individuals as a rule will carry less money in their pockets, and business firms less in their cash drawers, when

profits are low and business poor. The efforts of the banks to loan their surplus funds lead of course to a reduction in interest charges, which is accentuated by the fact that, in such times, more and better collateral is required, thus reducing the number of those able, as well as of those willing, to borrow.

The machinery by which the rate of interest is regulated is undoubtedly afforded by the circulating medium, but it is the machinery merely; the real cause of fluctuations in the rate must be looked for in the causes which bring it about—that more capital is employed by its owners, and that less money is kept in the pockets and tills of the people—as these facts are what ultimately determine the surplus of the banks, to get which loaned out is the proximate cause of the lowering of the interest rate. The ultimate cause is of course a decline in ordinary business profits.

Money, considered as a commodity, possesses a characteristic peculiar to itself in that it is the only one from whose retention no economic profit can be gained. The gain in convenience, in having a certain amount on hand, is a purely individualistic one, and the loss of interest on "cash on hand" does not appear as an element of the cost of any product. Cash is not "held for a market," at least in

the same sense that other commodities are, even when possessed of intrinsic value, like gold and silver coins; it is rather a claim on commodities in general than a commodity itself.

The objections raised in some quarters to what is known as "the use or productive theory of capital and interest" have this foundation, that, in the truer sense of the term, capital is not in itself productive, but only a means of production. It is however productive in exactly the same sense that labour and opportunity are. Enterprise, the only really productive force, pays interest, wages, and rentals for similar reasons,—to obtain in each case an essential means of production. If rent can be said to be paid on account of the productivity of land, wages on account of the productivity of labour, interest is certainly paid on account of the productivity of capital. It supplies to the enterpriser, as they do, an essential of production. This essential consists in relations of time, without the power to establish which the production of exchangeable or any other commodities would be impossible. This possibility is afforded by refraining, or abstinence, on the part of the capitalist, and the marginal abstainer must be actuated by an expectation of a future reward for his present

self-denial. This future reward may be found either in the quality, on in the quantity, of the purchasing power of the saved commodity it represents. If the need the commodity is qualified to satisfy is expected to be more urgent in the future, the commodity will be hoarded for that cause alone. But if the purchasing power that comes into being coincidently with the commodity can be expected to increase with time if judiciously employed, it will be unexpended when the inducement is sufficient. This expectation, which is that of the marginal saver, is founded entirely upon the enterpriser's expectation that he can make a profit by holding an equal amount of "capital goods." It is therefore time relations only which capital creates, and it is literally time which the enterpriser pays for. And this seems to supply us with a reconciliation between the "time" and the "use," or "productive," theories of interest.

As this chapter is likely to arouse more or less protest, it is advisable, for the purpose of being better understood by some economists, to consider further the content of the term "capital" as a composition of material things. Another, and to my mind better, conception of capital as a fund, has been advanced as an alternative use of the word. As I understand

the matter, this fund is regarded as a simultaneously increasing and decreasing aggregate of "capital goods," or saleable commodities. It has an entity of its own, not disturbed or affected by any change in the material objects possessed of value, so long as the aggregate remains the same. Are these two conceptions of capital mutually exclusive, or merely different aspects of the same thing? There can be no question as to the validity of the conception of capital as a fund. Is the concept of it as an aggregate of material things equally sound? Are such things as "capital goods" properly considered and spoken of as capital? Purchasing power must have some material representation somewhere, and the only way a saving can be effected is by the retention of some material thing. But, paradoxical as it may be, the material thing saved is never in the possession of the saver as an economic capitalist. Indeed it is not quite correct in economic discussion to speak of a material thing as "saved." An individualistic producer can indeed abstain from using the very thing he has produced, but there is no abstinence at all on the part of the economic producer when he retains possession of an article he has produced. The enterpriser never retains possession of an article longer than he is forced to, and a forced and

unwilling retention cannot fitly be spoken of as a meritorious abstinence that must be rewarded. This retention of what he has produced instead of earning a reward is penalised, and by increasing his cost of production reduces the profit of an enterpriser, unless he is able to increase his selling price correspondingly. The real earner of the reward of abstinence in economic production neither saves nor can save any material thing at all, for in his character of final consumer he cannot possess any material thing that has not already passed out of the domain of Economics, through its loss of exchangeability. What the economic abstainer abstains from is merely the exercise of a part of the abstract power to purchase which has come into his possession. It is not quite correct to speak of him as an abstainer; "refrainer" is the better word. We abstain from using some particular thing; we refrain from the exercise of a power. We can hardly speak of abstaining from something not in our possession. When the final consumer comes into possession of a commodity, he can abstain from consuming it, but it remains "consumer's goods" so long as he holds on to it himself. It is an item of individualistic capital and can only become economic capital goods by being again put on the market, and

it is then in the hands of the enterpriser. The function of the capitalist is refraining; the retaining is done by the enterpriser as an incident of his special function of ownership. The circumstance that the abstainer or refrainer as such is necessarily a different person from the retainer as such, and exercises a different function, seems to have been wholly overlooked in economic discussion.

The actual possession and ownership of all material things is a function of the enterpriser, and, as we have seen elsewhere, his reward for conserving them is not interest but profit. Any change in the value of property held for sale accrues as profit or loss. But if capital is an aggregate of material things, the income arising from their retention should be interest. Again, we speak of capital as invested in such and such material commodities; but it cannot itself be the things in which it is invested. Capital is not then a part, or kind, of wealth as the old definitions have it, but a fund of unexpended power of purchasing, consisting of a mere claim on wealth in general, due to the fact that the claimant was the originator, or the representative of the originator, of the initial abstinence or refraining from the use of purchasing power which enabled himself acting as an enterpriser, or some other enterpriser, to retain commodities possessed of

an equal amount of purchasing power. Refraining is rewarded by interest; retaining by profit or rental, according as the thing retained is for a market or for use.

But "fixed capital" and land and all other opportunities, at their capitalised value, are also constituents of wealth, and the capitalist, as such, has exactly the same claim upon them that he enforces upon all wealth consisting of saleable material things, and he is paid interest for delaying to foreclose his mortgage when he has loaned upon them as security. Those who are endeavouring to persuade us that everything, whose value or selling price can be capitalised, is capital, have this in their favour, that if any kind of material thing is capital every other species of material wealth must also be regarded as capital, as well as all immaterial rights and perquisites that have a selling price. Rightly considered, what earns interest, and what is therefore capital, is not any species of material wealth at all, but the claim to so much purchasing power (expressible in a common denominator agreed upon) as was possessed by the material wealth transferred at the time of its delivery. Capital is therefore a sum of abstract purchasing power held in abeyance, and capable of being transferred for the consideration of a percentage of itself in addition to the

eventual return of the principal. When the borrower invests this purchasing power in consumable goods held for sale, interest is a cost for which he expects to more than recoup himself out of the difference between purchase and selling price. And exactly the same thing is true when he invests his abstract purchasing power in land or any form of "fixed capital," except that here he expects his interest cost to be more than made up to him in the rent obtained. But the difference, the all-important difference, is here, in that the interest paid the capitalist when the borrowed purchasing power is invested in goods used up is an element in the cost of the product, while it is not an element of the enterpriser's cost of production when the borrowed purchasing power is invested in land or any form of fixed capital, because they are used only as means and are not used up. Strictly speaking the enterpriser, as such, is precluded from investing his borrowed capital in land or "fixed capital" because then he becomes the owner of an opportunity, whereas theoretically and as such he can only be a user, and obligated to the real owner, whether himself or another, for the value of the use, which is to him a cost entering into the final value of his product.

Land, mines, and other limited natural forces

which can be appropriated, preserve themselves, but their retention by a present owner demands abstinence on his part. All opportunities created by man are both obtained and preserved by abstinence. The continued existence and usefulness of opportunities involves therefore the establishment of time relations for their uses to be effective. Nevertheless they cannot on this account be considered as capital, when the term is defined by its relations to the enterpriser, because here it is not the time relations, but the uses for which the enterpriser pays. So far as an opportunity is appropriated, and not created by an investment of capital, this is very plain. And it should be equally plain for that part of opportunities not appropriated. Purchasing power, which is what the enterpriser borrows of the capitalist, once invested and embodied in either material commodities or as fixed capital, loses its abstract quality until again released and made abstract by a sale. During the interval it is not subject to the laws of interest but to the laws of profit and loss, so far as the value of the commodities or opportunities held for sale fluctuates, and to the laws of rent so far as the value of the use of the facilities for production in which capital is invested changes.

At this time when complaints of injustice to labour are so rife, it is somewhat singular that a

real cause of great injustice to all classes but capitalists has been overlooked. I refer to the existence of public indebtedness. The principles here advanced make it very plain that the interest paid on public debts is almost wholly an addition to interest at the expense of other forms of income. Perhaps wholly so, for what portion of it is paid by taxation on capital is probably recouped by a corresponding increase in the rate of pure interest. Manifestly the field for investment, and therefore the total amount of capital that can be accumulated, is widened by the exact amount of the national or municipal indebtedness of a nation, without any increase of its productive power. While the total annual product is unaffected, the portion of it obtained by capital is greater by exactly the amount of interest paid on public debts incurred for unproductive purposes.

When Jay Cooke spoke of a national debt as a national blessing, he was very probably influenced by an intuition which he did not himself understand. The creation of such debts is a temporary benefit, and this is what he perceived without comprehending why. The reason, of course, is that by widening the field for investment they act as a stimulus to industry in the way here pointed out. Like other energy due to stimulants, this has to be paid for by a cor-

responding depression of industry due to forcing capital towards the limit of accumulation, when the debt is paid off. In the end, therefore, nothing is gained from this cause, while all the interest charges paid are a tax upon other forms of income for the exclusive benefit of capitalists. The only possible excuse therefore for the creation of public debt is to help the nation over a critical period, just as a stimulant, which harms rather than benefits, will yet sometimes pull the taker through a difficult situation.

The prevalent idea that the creation of a public debt transfers to posterity a part of the burden imposed by a war or other great exigency is well founded, and it is just and fair that such burdens should be so distributed; but the end, however justifiable, is only obtainable by a disturbance of distribution between the productive factors, which is far from being just and equitable, and which therefore demands readjustment as soon as practicable. While public indebtedness is justifiable as a temporary expedient, the "funding" of public indebtedness—that is converting it into a permanent obligation—is to establish a permanent injustice to labourers. These remarks do not, of course, apply to public indebtedness incurred for productive purposes, as such debts are really social

investments and earn for the public, either in lessened taxation or social betterments, all or more than the interest charges; and as they necessarily supplant about an equal amount of private capital the labourers' proportion of the product is not necessarily affected.

Some words of caution are again advisable to prevent a possible, or perhaps probable, misconception of the author's theories as unduly exalting the economic function and position of the Enterpriser. When Enterprise is spoken of as the dominant function no return is intended to the old and discarded theory of the Physiocrats and Mercantilists, that the "surplus" is the proper object of industrial efforts, and that nations are well off economically in proportion to its amount. This term is susceptible of several meanings, not always carefully distinguished. When by "surplus" is meant the difference between what a nation annually produces and what it consumes, or in other words the annual national savings, it is indeed true that the greater their amount the more rapidly does the accumulated wealth of the country increase. The fallacy here, as we have already seen, lies in the tacit assumption that the annual national surplus can be increased by parsimony, by, that is, an unwise and niggardly contraction of consumption. Carried beyond a

certain point, national parsimony defeats itself by restricting production as much as, or more than, it decreases consumption. Nations are really prosperous not in proportion to the growth of their accumulated wealth, but in proportion to their ability to consume without depriving themselves of any available facilities for producing. The only economic justification of saving is to provide such facilities in such amount as the field for investment allows. Up to that amount saving eventuates an ultimate increase in consumption, due to an increase in the amount produced. That amount exceeded, production declines and possible consumption of course declines along with it, according to the theories here advanced, which manifestly differ more radically from the Physiocratic and Mercantile views about the "surplus," in this sense of the term, than does the conception of the productive process now prevalent, which, apparently at least, regards accumulation as an end in itself, and as restricted only by a decline in the rate of interest, whereas our theories regard accumulation simply as a means, restricted in amount, as all means necessarily are restricted, by the amount of the uses to which it can be put.

The Physiocrats and Mercantilists were not over-precise in their definitions of the term

"surplus." The underlying idea seems to be that it was the difference between the cost of a thing and its value, or in other words the unpredetermined residue now spoken of as profit. Looking upon what the nation consumed as the cost of what it produced, they regarded the difference as the national profit. Rightly enough, though perhaps unconsciously, regarding the expectation of profit as the sole incentive to production, they very erroneously inferred that the greater the annual savings the greater the incentive to production. Two errors are involved in this chain of reasoning. The national expenditure is no more a measure of the national cost of production than the total industrial and personal expenditure of an enterpriser is a measure of what it costs him to bring his product to market. The cost of production to an economic enterpriser is the purchasing power he parts with in interest, rent, and wages, and foregoes on such of his own capital, land, and labour as he devotes to his business. In individualistic and social production the cost cannot indeed be measured in purchasing power, but it is still what is expended or foregone—what utilities might have been retained or obtained in place of the utility actually created. As the utility difference between what a nation actually produces, and

what it might have produced instead, cannot even be calculated or determined, a national profit is necessarily incalculable and indeterminate, and by no means identical with a nation's savings, as the Physiocrats and Mercantilists seem to have taken for granted.

Their second error consisted in their regarding the "surplus" as the ultimate object of human endeavour, and holding the prosperity of nations as measurable by its amount. The present conception of the productive process recognises, indeed, that accumulation is a means not an end, but it agrees with the Physiocrats and Mercantilists to the extent of believing, or at least assuming, that it is a means for which an unsatisfied and unsatisfiable demand always exists and which always pays for its cost and something more, so that in a sense a nation's prosperity is still measurable by what it has accumulated. Our conception of the process diverges yet more from the "Pre-Adamite" one, in claiming that the usefulness of any means is necessarily limited by the uses it can be put to, and that as the only use of capital is to supply the enterpriser with such time relations as he requires, and as the time relations he requires are limited in amount to such quantity as he can find use for at a normal rate of profit, the national savings can, and

periodically do, exceed this amount—so that so far as accumulations can be looked upon as an indication of a nation's industrial success, it is only the amount it finds itself able to accumulate without depressing profits below the normal rate that can so serve.

CHAPTER IX

LABOUR

THE third subsidiary factor, which we are now about to consider, differs from the other two in a characteristic common to it and to enterprise. It is an active and self-initiated force, while opportunity and capital are inert or acted upon. They are properly spoken of as used or utilised, while labour is perhaps more fitly regarded as directed. This, however, while distinguishing it from the two wholly inert factors, does not elevate it from its subsidiary position, as enterprise employs all of them as means. And indeed the distinction itself is not absolute, as slaves and domestic animals, certainly items of "fixed capital," are also active self-initiated forces, which the enterpriser directs through their intelligence very much as he does a hired labourer, although he appeals to a different class of motives. Nevertheless the distinction holds in a sense, for while the animal and the slave must have sufficient in-

telligence to understand the master's directions —which are followed from fear of punishment and the hope of a sustinence, and therefore from self-interest—they receive no definite and pre-arranged part of the purchasing power they help to create. The motives therefore which induce, indeed compel, their activity are purely individualistic and not economic. To the extent that liberty of choice is denied they are inert and acted upon, and are not active participants in production in the sense of their participation being voluntary.

The distinction we are considering is analogous to that between services and commodities in that the sacrifice of the labourer is not embodied in anything he retains the control of, whereas the sacrifice involved in abstinence is embodied, as it were, in purchasing power, permanent so long as it is unexpended. It cannot be said perhaps that any sacrifice is involved in the act of appropriating. Nevertheless as appropriation is justifiable when it leads to an increase of production, even though the service performed involves no sacrifice, it is likewise embodied in a facility of production permanent to the extent that the employment of the facility is monopolised or restricted. The reward of labour is therefore direct and immediate whereas the reward of abstinence

and appropriation is indirect and postponed. Labour obtains an immediate income but abstinence and appropriation obtain only something capable of yielding income.

There is this to be said in justification, or rather in explanation, of the ridiculous claim that labour produces everything and should therefore have everything,—that the only direct personal sacrifices involved in an act of production are those of the labourer and the enterpriser. So long as capital and opportunity are existent and in possession, there is no personal sacrifice involved in their use. Once it is admitted that the division of the product should be governed by the personal sacrifices immediately involved in its production, we are forced to exclude the abstainer and the appropriator from any equitable share in it. Then, if we regard the entrepreneur as only a co-ordinator, he is only a special kind of labourer, and the whole product rightly belongs to labour. The falsity of this deduction becomes apparent enough in this statement of it. The proper principle of division is not personal sacrifice, whether immediate or mediate, but economic sacrifice, *i. e.*, not what is suffered but what is foregone and the entrepreneur is not as such a co-ordinator.

When the enterpriser is his own employer

in producing an exchangeable article, the two functions of labour and enterprise are indistinguishably mingled, except as the part due to him as labourer can be computed by what he foregoes, that is by what he could have earned if he had hired out to another. His wages and profits, however, taken together, while unpredetermined are pre-arranged, that is they must necessarily equal the total purchasing power created less the stipulated rewards of other labour, opportunity, and capital. When the product is unexchangeable, that is, a service rendered oneself, or material good consumed by its creator, it is a matter for the science of individualistic activities, and does not directly concern us, except to notice that the case is one in which two separate functions are exercised by the same individual. By the productive force "labour" we mean in Economics the intelligent efforts of free agents, exerted at the behest and under the direction of an employer, for a reward either stipulated in amount, or computed by a possible reward of wages foregone in the case of one employing himself.

Labour is always co-ordinating—the initial force that brings material things purposely into new space relations, and ideas into juxtaposition, or new place relations. This is as true of the navvy, who chooses where his pick shall strike,

as of Mr. Morgan when promoting the Steel Trust; the only difference being in the degree of each of the two kinds of co-ordination involved—the physical and the psychical. The intellectual effort of the navvy is indeed very small as compared with his physical exertion, and the manual labour of Mr. Morgan even smaller as compared with his intellectual effort, but both physical and mental effort are involved in every act of labour.

Here we see another reason why the definition of the entrepreneur as a co-ordinator fails. Even if we are willing to consider him as an intellectual labourer, and profits as a kind of wages, which is absurd, the distinction is one founded upon degree only, which is wholly inadmissible in any valid system of scientific classification. As Economics is indubitably a study of the functions exercised by individuals working in combination for personal ends, the difference between the co-ordinating labourer and the entrepreneur must be in the nature of their functions. But (and here we think is to be found the occasion of some confusion of thought) we do not mean, in the scientific use of the two terms, any given individuals, as it is impossible for the individual to confine himself to the exercise of any one of the four industrial functions. When we speak of a man as a labourer, we do

not mean that he is nothing else, but that labour is the predominant function performed by him, and that his industrial activity will be mainly governed by the inducements arising from wages. Any arrangement of individuals into classes, according to their predominant functions, must necessarily be more or less indefinite. In individualistic activities the result of every action, and indeed of every thought, is the joint product of at least three functions,—an opportunity is seized, an effort is made, and a responsibility is assumed, and the remaining factor is brought into play when any material thing is retained. One of the main objections to the Risk Theory of Profit has been that, as the entrepreneur must be the possessor of capital to obtain credit, it is as a capitalist, and not as an enterpriser, that he subjects himself to risk, merely putting his own capital in the position of greatest hazard. This is of course true, in the main, of the individual enterpriser, although cases can be cited in which credit is based entirely upon the character of the borrower. But we are now enabled to appreciate that, if it were entirely true, the criticism is wholly wide of the mark. At the best it is only an instance where one function cannot be exercised at all, except in conjunction with another, which circumstance by no means proves that the two functions are

identical or even similar. The real questions are, whether the loaning of capital on unquestioned security is the same kind of an action as assuming the risk and responsibility of the employment of that capital in industry, and whether the inducements, that is the results expected from the two actions, are governed by the same general laws and influences. Some confusion of thought in economic discussion is certainly traceable to the habit of speaking of landlords, capitalists, labourers, and entrepreneurs as distinct classes of individuals; whereas what we should distinguish between is the kinds of actions individuals perform. When we divide men into thinkers and doers, we do not mean to imply that because a man thinks he cannot do, or that because he does he cannot think. Every man is necessarily both thinker and doer. The difference between individuals as thinkers and doers is one of degree only, but the difference between thinking and doing is radical, though not more so than that between assuming the responsibility of an enterprise and co-ordinating the means required to subject oneself to responsibility.

Now what is the relation of the labourer to the enterpriser? What need of the latter does the former fill? When the enterpriser has secured his opportunity and engaged his capital, he finds

himself helpless unless he can bring them into relation, or co-ordinate them. The form or place of the capital, or rather of the things in which capital is invested, must be changed to make the opportunity available. How this is done is a matter of indifference to him. Whether it is accomplished directly through labour, or indirectly by labour, through the use of machinery, is wholly a matter of cost. What the enterpriser wants and what he will pay for is accomplished co-ordination in space or place. The amount of effort expended, or pain endured, by those he hires, he cares nothing about. He will pay no more for the labour of a cripple because the pain-cost to the cripple is so great, or, if he does, it is on the ground of charity, and not from economic motives. It is the kind and amount of co-ordination effected that governs what he can afford to pay.

We have here another example of the claim heretofore advanced for enterprise, as the best standpoint from which economic phenomena can be observed, and the best basis for their scientific arrangement. The moment we seek the definition of labour in its relation to enterprise, we at once see that what the employer wants, buys, and pays for is results, and that therefore its distinguishing characteristic is not effort or pain, but co-ordination in place or

space. All things material and immaterial are in flux, that is are undergoing change of time, form, or place. To divert the course of change in form or space requires of course the interference of fresh force, and the fresh force to be purposeful must arise from an act of volition. This is exactly what the common labourer does, and what he has to offer for sale is the change he can bring about in the direction of the forces of nature, the co-ordination he is able to effect in the form and place of material things. The distinctive function of physical labour can therefore be nothing else but co-ordination in space, and of psychical labour co-ordination of ideas, facts that seem to have escaped those who insist upon defining the entrepreneur as the co-ordinator. The individual entrepreneur is indeed always a co-ordinator, but that is because he is a labourer as well as an enterpriser, because he can and indeed must co-ordinate for himself as well as be co-ordinated for by others. He cannot of course assume the ownership of the product without directing, either himself, or through an agent, the co-ordination from which the product results. He cannot assume the responsibility of an undertaking in which he himself has done nothing at all. The purpose is ownership —co-ordination is merely the means.

Undoubtedly, those who have defined the

entrepreneur as the co-ordinator have not intended the term in the wide signification here given it, but it can, I think, easily be made evident that their narrower use is illegitimate. They would perhaps exclude the physical act of placing things in relation, confining their meaning of co-ordination to management, that is to the volition or psychical effort from which the physical act results. Of course every volition involves an assumption of responsibility. Whoever the executant, the individual is responsible for what he wills and directs. Purpose and responsibility are inseparable. When the labourer performs an act of co-ordination he acts with a purpose, and if his purpose is misdirected or inadequately accomplished, he cannot transfer all the consequences to his employer. He at least risks his job. There always remains a trace of enterprise in labouring, though the enterprise involved is individualistic, not economic. There remains likewise a trace of co-ordination in every act of enterprise. The individual enterpriser has at least to choose the stock he will purchase, or the agent who will select the responsibilities he is to assume, both acts of co-ordination. Now this agent, in choosing risks for his employer, also runs a risk for himself of exactly the same character as the labourer's; namely that of losing his situation

from errors of judgment, but this again is an individualistic risk. The choice of the economic risks which he assumes for his employer is exactly the same kind of co-ordination as his employer's choice of him. Both are acts of intellectual, as distinguished from physical, co-ordination. The agent is paid by salary—a form of wages,—the employer by both wages and profits, because while both co-ordinated, the latter alone subjected himself to the results of the co-ordination. The difference between the action of the employer and that of the agent is fundamental, and cannot therefore be found in what is common to them both, namely the choice of the direction co-ordination shall take, which is the mental part of an act of co-ordination as distinguished from the physical. To assume the consequences of co-ordination differs fundamentally from co-ordination itself, even when some partial act of co-ordination is a preliminary to subjecting oneself to the entire consequences of the whole co-ordination. The entrepreneur, or enterpriser, is therefore, not the co-ordinator, but the one for whom co-ordination is effected.

If it is still insisted that the entrepreneur can be properly defined as the co-ordinator, because "the acts of the agent must be considered as the acts of the principal," it would indeed fol-

low that enterprise, or the assumption of responsibility, and co-ordination, restricted to the intellectual part of the process of bringing things into relation, would always be coincident, but that is hardly saying that they are the same thing. We can certainly distinguish between the act of assumption and the choice, directly or through an agent, of what is to be assumed, though whether we can make the distinction is not a matter of much theoretical importance to our argument. If we are denied the privilege, it is only because intellectual co-ordination and enterprise are identical things, two aspects of the same action, the one from before and the other from behind. But surely it is inadmissible to regard the acts of an agent as the acts of his principal, in the sense the argument requires. What is meant by the phrase, in common speech, is only that the principal assumes the responsibility for what is done by his agents, not that he must be regarded as the actual performer of what they do for him under his direction. The contrary is to deny the existence of any such thing as labour either physical or intellectual. Why should the intellectual efforts of subordinates be attributed to principals, any more than their physical efforts? No reason can be given, but if the physical efforts of agents are also to be attributed to

principals, the entrepreneur is the only physical labourer and we must eliminate physical labour also from the productive forces, and regard all wages and salaries as only a form of profit. Any way the matter is looked at, we are finally forced to the conclusion that co-ordination, whether physical or mental, is the peculiar and distinguishing function of labour. Which granted, it is of course self-evident that it is only incidentally, and as an individual, that the entrepreneur is a co-ordinator, and that, as an individual, he is only necessarily a co-ordinator in that he is forced to perform at least one act of mental labour, as a prerequisite to assuming the ownership of the product.

I do not remember that any one has verbally defined the term "labourer," in its economic sense, as "co-ordinator," but I think that a careful consideration of what has been written about labour will show that the idea, though never expressed or formulated, really underlies all discussions of the subject. It is often explicitly stated, and it has never been controverted, that what physical labour effects is merely to change the form and place of matter. I do not remember the complementary statement being made that mental labour consists in associating ideas. Still, as the fact that there is such a thing as mental labour is fully

acknowledged, the necessary implication is that it consists in the re-arrangement of ideas. It seems to have been overlooked however that this is just what co-ordination consists in. The meaning of co-ordination is to bring things into new relations for a purpose—to re-arrange them with a definite end in view. Surely this is only another form of words for what everybody recognises to be effected by labour.

The probable explanation of how such a truism as this came to be overlooked happens to be a very good illustration of how the prevalent conception of the productive process leads to mystification. The attempt to arrive at a concept of labour by induction led almost necessarily to its definition in terms of effort, as the effort involved is certainly the most striking characteristic discoverable by observation. Consequently we find in all economic disquisitions constant reference to the pain-cost of labour, carrying the implication that it is its economic cost. Elsewhere I have shown that the economic cost of anything is the economic quantity foregone to obtain it, and not any personal sacrifice of feelings involved, the latter of course being a purely individualistic matter. Observation also has failed to detect which of the many peculiarities of labour is the fundamental one. And it cannot be blamed for this

as the advance from the particular to the general is necessarily empirical, which is to say that the inductive method seeks fundamental distinctions only as the culmination of its process. It selects such peculiarities as are most striking, and tries them on, one after another, until it finds one that appears to fit, and is usually satisfied when the garment needs only a little alteration and even then does not fit very snugly. Observation did indeed disclose that labour had a function to perform, but not that this function was its fundamental class-mark. Consequently it looked upon this function as a mere attribute of labour, to which it need give no very exhaustive study, and as the productive factors were more obtrusive facts than the productive functions it naturally regarded them as fundamental and, so far as it defined functions at all, did so in terms of the factors. Consequently it failed to detect the fact that co-ordination was the fundamental peculiarity of labour, and when it thought the term applicable also to the function of the entrepreneur, because as an individual he did co-ordinate, it so applied it without scruple—which it could do without detection the more easily because it had never made much theoretic use of the function performed by labour. Nevertheless what use it did make of it tacitly

assumed that it was co-ordination, though it has never perhaps been called by that name. The verbal recognition of the idea does, I think, enhance considerably the clearness of our conceptions. At least it makes it evident that co-ordination is not the distinguishing function of the entrepreneur.

It will also, I think, aid us in other directions. For instance, a good deal has been written about the pain-cost of labour to the labourer, most of which is true enough, but has nothing to do with Economics. These pain-costs are purely individualistic matters, and have no direct relation at all to what labourers obtain for their efforts. Of course men will engage in pleasant occupations for lower wages than disagreeable ones command, and will decline to work beyond the point where the enjoyment to be derived from the additional wages is overbalanced by the increased pain-cost of extra hours. But the balancing of such considerations, the act of valuing involved, is purely individualistic. It determines indeed the kind and amount of co-ordinating the labourer is willing to sell, but not what share of the product he can obtain for a given effect produced. Economics, as a science, is directly interested in what this latter amount shall be, as compared with the other shares of the product, and only

indirectly in the individualistic circumstances affecting its pain-cost, just as it is only indirectly interested in the tendencies affecting savings, or the appropriation of opportunities, or the spirit of enterprise. The influences which make men powerful, skilful, energetic, lead them to be frugal, enable them to detect unappropriated opportunities, or to become more venturesome, are individualistic and belong to the study of character, and are useful to Economics only as data. The only cost which Economics has to consider is exchange cost, that is the purchasing power sacrificed to acquire the purchasing power actually obtained, whether it appears in the form of wages, interest, rent, or profit. The economic cost of anything is simply the purchasing power sacrificed, or foregone, to obtain it.

What Economics, as a science, is concerned about is how variations in the available amounts of labour, capital, and opportunities, and the spirit of enterprise will affect combined production under the stimulus of personal incentive. The tendencies which cause these amounts to vary are to be found in the circumstances which govern social evolution and the development of human character and belong primarily to Sociology and Individualistic Science, and, strictly speaking, are extrinsic to Economics, though

none the less important as data on that account.

An important peculiarity of labour which has been generally overlooked, or at least is very rarely dilated upon, is that it is the least elastic of the four productive factors. The opportunities furnished by land cannot indeed be very rapidly enlarged by bringing fresh land under culture, but the requisite elasticity can be obtained within a single year by a more intensive culture, and the eagerness with which other kinds of opportunity are sought quickly responds to the stimulus of unemployed capital. Capital, as we have seen, is, at least in progressive communities, always pressing upon its limitations, or is being so rapidly accumulated that such pressure will soon commence, and is thus quickly adapted to any enlargement of the field for investment. But it not only takes about eighteen years to bring up a labourer, but labourers are not raised for gain. The motives tending to increase the labour force are not only non-economic, but of an entirely different nature from those leading to the appropriation of opportunities, and additions to capital. In the latter actions a present penalty is incurred for the sake of an expected benefit in the future, whereas the motive to procreation is an immediate gratification, the price of which is to be paid in the future. The

creation of labour force is affected therefore by tendencies the very reverse, in this important respect, of those leading to the creation of capital and opportunity. Marriages to be sure are more frequent in prosperous years, and thus an active demand for labour tends to increase the supply eventually, but not only is this supply furnished long after the demand, but it is also only an indirect result. Children are brought into the world for the private satisfaction of their parents, and not because some enterpriser twenty years after will need them as labourers. The transformation of unskilled into skilled labourers, though its motive is similar to those leading to appropriation and accumulation, is also a tedious process, so that the efficiency of an existing labour force is comparatively inelastic. Nevertheless as the enterpriser's demand for co-ordination is, as we have seen, quite variable, while the available labour force is so unvariable, both in quantity and in quality, they must be adjusted, and the necessary adjustment between them is brought about by the employment of only such of the existing labourers as the prevailing cost of reproduction justifies.

As the quantity of available labour cannot be adjusted to the temporary variations in the demand for labour, the necessary equilibrium

must be obtained by an adjustment of the number of labourers employed. Consequently when business commences to improve and more labour is required, enterprisers are forced to advance money wages to obtain it. This means that previous to the advance in money wages there has been a decline in "proportional wages"—that is profits are obtaining a larger and wages a smaller proportion of the product than is usual—which the advance in money wages is supposed to adjust, and which would adjust it if the general market for commodities remained unchanged. Whether it will remain unchanged depends, however, upon an entirely distinct matter, namely, whether the scarcity of commodities which initiated the rise in prices preceding the advance in money wages continues unabated—which circumstance depends in its turn upon the proportion of the general income which is saved and added to capital. If the amount of commodities demanded is the same, prices must tend to bear the same ratio to the cost of reproduction, whatever that cost is in money, and any temporary change in the ratio is almost immediately rectified by a change in the price of commodities. If there are no savings there can be no addition to the stock of saleable goods, and therefore the extra money wages

paid affords an additional money demand, until prices in the general market have advanced to a point where the new scale of money wages will have only the same purchasing power as the lower money wages obtained before the advance. That is, reckoned in purchasing power, what labourers have momentarily gained by an advance in money wages is almost immediately taken away from them, and their "proportional and commodity wages" are just what they were before—and so on *ad infinitum*, so long as the amount of capital enterprisers are forced to employ is not enlarged.

Labour is often erroneously called a commodity, but if the term be allowed it differs from all other commodities in this circumstance: the supply, when limited and unchangeable, does not gain in the purchasing power of each unit when the demand is increased, because, unlike any given commodity, an advance in its money price is always accompanied by a corresponding loss in the purchasing power of money, or, in other words, by a corresponding advance in general prices, other circumstances of course—that is the gross amount of circulating capital—remaining the same. On the other hand if all labourers were always willing to work at any wages offered them, they would lose nothing by so doing if the accumu-

lation of capital were not affected, as the prices of what labourers consumed would decline correspondingly. Such action of the labourers would tend of course to a temporary rise in the rate of profit, which would so stimulate the competition of enterprisers for labourers as to shortly raise wages to their previous level. Under all conceivable circumstances, therefore, the proportion of the product that accrues to labour is self-adjusting, and can only be temporarily affected by the labourers exacting higher or accepting lower money wages.

It follows, as a corollary of the views just advanced, that it is a matter of supreme importance to every community and nationality that the field for the profitable investment of its capital should be enlarged as much as possible, and by every legitimate means, as it is in such enlargement that the real cause of the growth of the national wealth is to be found. Every additional opportunity for profitable enterprise, by absorbing the capital that would otherwise fail to find profitable use, postpones the evil day when enterprisers will be forced in self-defence to limit their operations, and curtail the employment of labour. As a matter of fact that time always comes eventually, no matter how much the field for investment is widened, for the more prosperous

the times, the more rapidly is capital accumulated, owing to the fact, already pointed out, that marginal savings are always made out of incomes greater than the average yearly expectation. And it is also to be noticed that, as enterprise is strictly limited by the available labour force and the state of the arts, the greater the capital that can be profitably employed, the greater the capital per capita the nation will have, except of course to the extent that foreign capital invades its field for investment. And as it results from a nation's possessing a large amount of capital per capita that a greater number of its inhabitants are in a position to save, the competition between savers will be keener, so that the marginal saver in a prosperous nation will be satisfied with a lower rate of return in pure interest, and this again increases the demand for labour and widens the field for the profitable investment of the national capital both at home and abroad.

In backward and semi-civilised communities, and in those whose political conditions fail to afford sufficient security for enterprise and capital, and also in purely agricultural countries, the same disparity in the elasticity of the three subsidiary productive factors does not obtain. Great variations in the pressure of capital upon its limitations and in the availability of oppor-

tunities do not occur, and consequently they rarely, if ever, suffer from panic due to purely industrial causes, or from periods of great industrial stagnation, not traceable to social or political conditions or to crop failure, except of course to the extent in which the demand for their exports falls off, on account of panic or stagnation having reduced the buying power of the accumulating nations. Stagnation is more constant and not so periodical. Their condition is rather that of perpetual industrial inactivity, so that the periods of activity enjoyed by the industrial nations must be looked upon as a gain, rather than to regard the more inactive periods as entailing a loss.

The important point is that any nation which has reached the stage where capital exerts a variable pressure upon its limitations will very shortly have all the capital, either native or foreign, that can be profitably employed, and at times more; and that the more avenues of profitable investment it opens up, the more rapidly will its wealth increase. The permanent additions to the national capital, thus rendered possible, are acquired, not at the expense of consumption, as consumption will be greater during a period of continued activity and accumulation than it would have been during the same period if it had been one of stagnation,

but are the combined result of labour force that would otherwise have been wasted in idleness, of opportunities that would have been overlooked, and of enterprise that would have been misdirected or unthought of.

This inelasticity of labour force as compared with the other productive factors affords explanation for a good many other apparent anomalies. In it, I think, is to be found the real value of colonies to a nation. We frequently come across attempts by statisticians, who are neither economists nor statesmen, to calculate the value of colonies by computations of the profits obtained from the exports to, and the imports from, them. These gains are of course a benefit to the colonising nation, but when they are less than the cost of colonial administration, it by no means follows that the colonies should be cast off as unprofitable appendages. The main gain from colonial possessions is the enlargement they afford to the field for investment—their enhancement of the spirit of enterprise, which enables a people to continue accumulating after the domestic demand for capital is supplied. Colonising nations also naturally develop their commerce and manufactures, both of which occupations afford a wider field for investment than agriculture. The mere trader, whose capital is

locked up in the stock of goods he is carrying, employs more capital per capita of employees than any other enterpriser. The nation, therefore, that is able to carry in stock, not only the goods required by its consumers, but also the goods required by foreign consumers, widens thereby its field for investment, and must increase its accumulated wealth, while at the same time consuming more than it would have been able to produce and consume if its field for investment had not been widened. The important fact is that such additions to capital are almost wholly the result of enabling the enterpriser to employ labour that would otherwise have been wasted in idleness.

Again, we see why the ravages of war, although necessarily much smaller in amount, are so fatal to backward nations in which there is but little variable pressure of capital upon its limits, and so rapidly repaired in accumulating nations. When Germany exacted that enormous indemnity from France, France almost immediately entered upon a long sustained period of industrial activity, and eager employment of labour; while Germany very shortly afterward suffered from industrial depression and lack of employment; so that to-day France is probably about as rich and Germany very little, if any, better off than if

the indemnity had not been exacted. Despite the enormous destruction of wealth, and the yet more serious loss of labour force, the United States is probably richer, rather than poorer, from the civil war. The practical industrial result of that terrible catastrophe has been to widen our field for investment and remove restrictions upon enterprise utilising our labour force, and thus to make our accumulations, and our annual product per capita, greater than would have been the case if the old conditions had continued to this day.

As labour force is not only the least elastic and most strictly limited of the productive factors, but also the one factor whose increase or decrease in available amount is not directly affected by economic considerations, it necessarily follows that a nation's prosperity depends mainly upon its existing labour force being so expended as to yield the greatest possible product. The periodic waste of labour force through the enforced idleness of labourers during times of industrial depression indicates that the economic system of production is not wholly successful in accomplishing this. Owing to the now somewhat impaired dogma of *laissez-faire*, which however still exerts a very great, though often unconscious, influence, it is generally taken for granted that the entre-

preneur in best utilising labour and capital for his own advantage, will necessarily employ them to the best advantage of the community of which he is a member. The recognition of enterprise as standing apart from, and dominant over, the other productive factors should lead us to recognise that this assumption, if not wholly unfounded, is at the best true in a very partial and limited sense. The fallacy of *laissez-faire* will surely be evident to any one appreciating that the guiding principle of economic production is not the totality, but only the residue, of the product. Enterprisers are indeed members of the community and any success attained by them is an item of the general welfare. It is also true that the appropriators of opportunities, savers of capital, and furnishers of co-ordination are members of the community and any weal obtained by them is an item of the general weal. But it is very far from true—and this is what is really assumed in the dogma of *laissez-faire*—that the enterpriser in utilising an opportunity will be careful to preserve its whole productive power. On the contrary he can benefit himself only by restricting the total amount of benefit which the new opportunity is capable of yielding as a facility in production. Neither will the enterpriser, in his employment of capital, give any

thought to stimulating accumulation by so using it as to widen the field for investment, unless there will result an extra profit for himself. Thus he would never buy a machine which would produce only at the same cost as the labour it supplanted, although his doing this would be a distinct gain to the community, for by the supposition, the labour required to produce the machine is not only necessarily less than the labour released by its use, by at least the profit and interest on the investment, but it will of course be appreciated by economists without further argument that the profit and interest on the capitalised value of such a machine would be a net addition to the total yearly income of the community, because the supplanted labour will continue production and the investment will be made by capital that could not have been accumulated if this place for it had not been made. The whole cost of the machine is therefore a permanent addition to the productive capacity of the community. Nor will the enterpriser, as such, do anything to increase the efficiency of labour unless he can discover an extra profit for himself in the change. Thus he would not hesitate to employ a process that would employ one hundred men at a dollar a day, instead of one producing the same result by the labour of eleven skilled

workmen at ten dollars a day, despite the fact that his doing so would result in a benefit to the whole community of what eighty-nine common labourers could earn, together with a profit on the wages paid them, less the cost of educating the eleven skilled workmen. The criticism of this example, that some may be tempted to make, is readily seen to be absurd; namely that the value of the labour of the eighty-nine released labourers is presumably the same as the cost of educating the eleven. According to this, if the average working life is taken at thirty years, it would require the equivalent of over two hundred and seventy years of common labour to educate one of our skilled workmen, or in other words the sacrifice of nine working lives to make another working life about nine times as productive. Skill is worth many times its cost of acquisition.

Neither will the individual enterpriser be at all influenced by what is best for the whole class of enterprisers, unless he is to be individually benefited thereby. He will make no personal sacrifice to raise the general average of profit, or to extend the bounds of enterprise. As we have already seen, no enterpriser will engage in occupations of peculiar hazard for the average of net profit which will satisfy him for ordinary ventures. The business man is satisfied with a

small balance of profit over loss, provided the balance is reasonably secure, but will not embark in hazardous enterprises, in which he may meet great losses unless there is a chance of profit more than proportionally greater. In a long course of extra-hazardous ventures, the net difference between profits and losses will necessarily be greater, probably many times greater, than the net difference between the profits and losses of a like number of safer ventures. Now if we suppose, for the purposes of illustration, two classes of ventures, differing in hazardousness, in one of which the normal difference between profits and losses is five per cent. of the capital engaged, while the normal difference in the other is ten per cent, the more hazardous class of enterprises evidently yields to the entire class of enterprisers, and through them to the community at large, twice as much net income of profit as the less hazardous. The class of enterprisers as a whole, as well as the community at large, have a distinct interest in the more hazardous enterprises being undertaken by native, and not left to foreign undertakers. According to our supposition, the two classes make equivalent demands upon land, labour, and capital, but if the expectation of net profit in the latter is only ninety-five per cent. greater, native enterprisers will not engage in the more hazardous

class of operations, despite the distinct advantage to the class, as a whole, and to the community.

It is also to be noted, though this criticism does not conflict with the old conception of *laissez-faire*, that enterprisers, as such, can pay no regard to the effect of their undertakings upon the development of individual character, and upon social relations—upon all the incidental results that cannot be bought or sold—despite the fact that such results may outweigh in importance those possessed of value in exchange. But, while it is essential to the exposition of our subject that these deficiencies of enterprise as the conductor of industry should be noted, I am far from claiming or supposing that on the whole the economic process does not result in a far greater production than either the individualistic or social.

I am disposed to put great faith in what may be called the unconscious cerebration of the race. A popular notion, persistent despite scientific exposition of its apparent falsity, usually has some solid ground to stand on which students have overlooked, and when the "man in the street" persistently refuses to accept theoretical conclusions, not susceptible of statistical verification, the theorist should search diligently for the real reasons under-

lying the practical rejection and neglect of his apparently established conclusions. Have we not here the real reason why agricultural peoples so inevitably adopt a protective policy at certain stages of their industrial development, and why they persist in believing it advantageous to labourers? When we once recognise the importance to a nation of its labour force being so utilised that its field for investment will be widened, and its production per capita will be as great as possible; and that enterprise cannot be depended upon to give this direction to labour; we surely can find some excuse for the state's interference with the course of industry. I cannot but think that the failure of most economists to recognise the situation is due to their not having more fully investigated the influences that govern accumulation, and the utilisation of labour force, from which they would have learned that it is the demand for capital, exerted by enterprisers, that determines the amount that can be accumulated, and that an increased effectual demand for capital leads, by the utilisation of idle labour, inevitably and very shortly to the supply of the capital demanded and from domestic sources, unless foreign capital rushes in to fill the gap; whereas an increased demand for labour does not bring

about any increase of available labour force as a direct consequence, and only indirectly leads to an increase in the supply after an interval of about eighteen or twenty years, and not even then if, in the meantime, the standard of living has been raised. Is it not just this instinctive feeling that something can be gained by diverting its labour force to industries requiring more skilled labour, more capital per workman engaged, and with a higher normal rate of net profit, and that enterprisers if left to themselves will not naturally turn to industries of the desired character, in which labour can be most productively employed, that leads undeveloped nations to offer enterprisers the inducements afforded by protective duties? To verify this deduction so far as possible, the writer some years ago made a statistical investigation of the census reports for 1880 of both Great Britain and the United States, with the result that, in both countries, the per capita productivity of agriculture appeared to be only about half that of manufacturing and one third that of commerce. Statistical results of this character are not to be sure very reliable, as too much estimating and averaging has to be done to obtain them, but if anything like this difference in per capita productivity really exists—and that a very great

difference does exist the figures show beyond question—there is a material gain to a nation in diverting its labour from the soil to the arts, and still more to commerce—a gain, of course, obtained at the considerable cost involved in the increased price consumers have to pay for protected commodities. How the gain compares with the cost is an open question, into which we cannot enter here, the only matter of theoretic importance to our argument being the question whether such a gain can be obtained by directing labour into channels in which it would not otherwise flow. It may, however, be noted in this connection that free trade has in England, as in every other densely populated country, the same effect that protection has in America, of diverting labour away from the soil, and that, to the extent that this is a national advantage, the prosperity of England under free trade is hardly an argument for the United States adopting that policy. There is also considerable historical verification of the position that the character of a nation's industries is the principal cause of her industrial failure or success. From the time nations commenced to trade with each other, those with the most productive soils—with what are spoken of as the greatest natural advantages,—and which, ac-

cording to the commonly accepted theories, should have been the richest, have invariably been poorer than those nations that were forced into manufacture and commerce, because their soil was inadequate for their support. Tyre, Sidon, Athens, Carthage, Venice, Genoa, Florence, Holland, and England have in turn held the supremacy in wealth. The assertion is usually made that these nations monopolised manufacturing and commerce because they had the necessary capital, or, in other words, they were commercial and manufacturing because they were rich, and not rich because they were commercial and manufacturing. But if so, how did they get their start, handicapped as they were by the lack of natural advantages? And how does it happen that, unless a protective policy has been adopted, no nation, with fertile soil and an abundance of it has ever rivalled them in prosperity? Another instance is to be found in the history of European Jews. Debarred from agriculture and from many other occupations, they were forced into commerce and banking, the industries pre-eminent over all others for the amount of capital required per capita and for per capita productivity. They were forced by restrictive laws into the widest possible field for investment, and the limita-

tions upon their accumulating were the least restricting; and consequently their accumulations were never checked, until now they are a far richer people than their former oppressors, and as the direct result of the very acts of oppression intended to impoverish them.

The Theory of the Comparative Inelasticity of Labour as a Factor in Production seems to me very important, not only because of its corollary, the limitation of accumulation—for of course there is no limitation to capital when there is a corresponding increase in the number of existing labourers,—but also because it affords a practical refutation of the dogma of *laissez-faire* and of the dogma of individualism, at least in their extreme forms, and seriously undermines the major premise of what has hitherto been regarded by many as an irrefutable objection to the policy of protection—the premise namely that any interference with the natural course of industry diverts labour and capital to less productive employments; while the truth is that the diversion may be only to employments less profitable to the individual entrepreneur, but which are nevertheless more productive because more profitable to enterprisers as a class, and beneficial to capitalists as a class in widening the field for investment, and to controllers of opportunities as a

class by making old opportunities more valuable, besides affording an opening for the appropriation of new ones, and to labourers by affording them both more varied and constant employment and a higher average of wages in more skilful occupations. To what extent protective tariffs have accomplished such results does not concern us here. It is only the theoretic possibility in which we are interested, and that I believe is now established.

As I hope to show later, this theory of the comparative inelasticity of the labour force, with its corollary of the periodic pressure of capital upon its limitations, also sheds some light upon the great question of trade unionism and the trusts, and is indeed essential to any well proportioned conception of the industrial organism and its natural operations and evolutions. As the accumulation of capital and the appropriation of opportunities naturally adjust themselves to the productive capacity of labour, the real secret of national wealth is to be found in such employment of a nation's labourers as will result in the largest production per capita, leaving accumulation and appropriation to adjust themselves to the exigencies of the industrial situation.

CHAPTER X

THE PRODUCTIVE PROCESS

TO recapitulate, in a more condensed and consecutive arrangement, the view of the productive process here taken is as follows:

The result of every volitional human activity, physical or mental, is a product, whether it be a thought, an emotion, an idea, or a sensation, or whether it is embodied, either in a service or in a material commodity capable of satisfying some human desire either immediately or indirectly.

That the inevitable condition of creating, or continuing to possess, a product is the subjecting oneself to the risks and responsibilities attached to its possession. The net effect of the product upon the weal, or physical, intellectual, social, or moral well-being, of its possessor, after the cost of obtaining it is allowed for, is necessarily uncertain, and always therefore an "unpredetermined residue" or "profit," and is the distinct result, incentive to, and

reward of the involved assumption of responsibility. And as net results of this character are the only ends, or purposes, of psychical and physical activity, the hope or expectation of profit is the sole inducement to every volitional human thought or action. The individual therefore in whom ownership of a product first inheres is its only producer in the strict sense of the word, just as it is the man who pays for having it dug who digs the ditch, and not the owner of the land or of the spade or of the muscular force employed.

In the creation and continued possession of a product there is always involved the exercise of two or more of the four productive functions, one of them as cause or purpose and the others, in a subsidiary capacity, as means. To assert that an individual can exercise the dominant function without also exercising one or more of the subsidiary functions, is really to assert that it is possible to accomplish an end without adopting any of the necessary means. Any one desirous of subjecting himself to the responsibilities and risks, inseparably attached to the attainment of a desired result, can create or possess it only by establishing certain space relations, if the product has a material embodiment, or certain relations of juxtaposition in thought, if it is to have no physical embodiment. To

establish such relations physical effort is required for those with a physical embodiment, and mental effort for those without, as well as for the intelligent direction of physical effort, which would necessarily be purposeless otherwise. A mental effort always, and some physical effort usually, is necessarily involved in the exercise of choice, inseparable from the assumption of responsibility, as, though we may delegate to others the selection of the responsibilities we are to assume, we must at least choose the choosers. These efforts of the individual entrepreneur together with the similar efforts of those he employs constitute the productive force Labour, which is necessarily involved in the creation of every product as above defined, as well when the enterpriser exerts himself as when he pays others to exert themselves for him.

But the space relations, or co-ordinations of material things, which it is the special function of the subsidiary productive factor "labour" to establish, cannot be brought about instantaneously in all instances. In case the product is a personal service rendered to oneself or to another, there is no interval of time between production and consumption, and the same is true of all immaterial products such as thoughts, emotions, or ideas, and all products involving place

relations not those of space. There always exists however an interval of time between the initial step in the creation of a material commodity and its final consumption, and for such products a time relation must be established. Such relations are not formed by anything that man can do, but by what he refrains from doing. Products, whether finished or unfinished, accumulate as space relations are set up, if we refrain from consuming or destroying them. Unless we interfere, time relations establish themselves. This abstinence, or refraining, is the function performed by the capitalist. The results of space relations necessarily persist so long as we preserve instead of consume them, and accumulate so long as we continue to add new space relations to them. Individualistic and social capital may possibly be said to consist of the material commodities preserved because they are preserved for themselves. Economic capital however does not consist of the material things actually preserved, but in the command over utilities in general afforded by them, because material commodities held for a market are not preserved for themselves, but for their attribute of purchasing power, and also because they are not preserved by the accumulator of capital but by the enterpriser. Economic capital is not therefore the heterogeneous mass

of existing commodities in which it is invested, but the sum of their power to purchase. The distinction is easily comprehended, being indeed the same as that between a house or farm, and the mortgage upon them. Capital is not all material wealth itself, but a claim on all material wealth. To suppose that capital is the thing in which it is invested, is to involve oneself in a contradiction of terms, which seems to have been generally disregarded. When the possessor of any specific thing preserves it merely for the purpose of consuming it himself at a later period—when its marginal utility will be increased, since otherwise he would not preserve it—he indeed, as an individual, retains the specific thing for itself, but the "capital goods" saved is not an economic, but an individualistic, quantity, for there is neither a creation nor a prolongation of purchasing power. Moreover, as in retaining the thing itself the saver assumes the risk of ownership, he holds possession of it as an individualistic enterpriser, and not as an individualistic capitalist. When however the thing is saved not for itself but for its purchasing power, what the saver retains as an economic capitalist is not the thing itself, but its power to purchase, which he necessarily holds in the form of an unforeclosed claim on "capital goods" actually owned, retained, and held by some one

else, or by himself in another capacity. If he retains the thing itself he does so as its owner —that is as an enterpriser and not as a capitalist. What he retains purely as a capitalist is merely a certain command over utilities in general, which command he is able to transfer, for a period agreed upon, to any one desirous of actual ownership with its attendant risks and responsibilities. Economic capital, or to adopt the prevailing, though somewhat inaccurate phraseology, "economic circulating capital," is not therefore a stock of commodities but a fund of general purchasing power, as is evident when we consider the character of the income arising from each. The command over the fund, or the privilege of applying its power to purchase, is paid for by an interest charge, but when the fund is invested in specific commodities the income derived from their retention is always greater or less than interest. The enterpriser's command over the fund is in abeyance so long as the investment lasts, and when the investment is realised—when, that is, the goods in which the fund was invested are sold—the fund reappears, but in an augmented or diminished form as the case may eventuate, the difference, less any costs incurred, being a profit. It is evident of course that it is the gain arising from what others are willing to pay for the privilege of acquiring and

retaining "capital goods" which is the reward of abstinence, and the net gain arising from the possession and retention of the actual commodities invested in has no relation to abstinence, except as the interest charge on an investment is a cost, which the actual owner of anything has to consider when determining the advisability of retaining his ownership.

When capital is invested in land or some other form of "fixed capital" the situation is somewhat complicated by the fact that the individual capitalist retains the title to the thing itself in which his capital is invested. He therefore necessarily subjects himself as an individual to the risk of change in the value of his property, to, that is, a profit or a loss as the case may be. As an individual therefore he is to that extent an enterpriser also. What he does when he hires out or rents his property to another enterpriser, is to transfer to that other its use, or in other words the relative advantage in production afforded. He foregoes and gives up the interest he might have obtained by loaning instead of investing his capital, in exchange for the market value of the use of the "fixed capital" he has invested in. Having exchanged an income regulated by the laws governing interest for an income regulated by the tendencies governing the worth of special uses, he has changed

his economic function. He cannot longer be accurately spoken of as a capitalist so long as he retains his title to land or other "fixed capital." As owner of "fixed capital" he is not a refrainer or abstainer but a furnisher of opportunity. His claim upon utilities in general has been abandoned for a claim on a specific or "fixed" article, the use of which will yield him an income of rent.

If now, to complete our analysis, we suppose the "landlord" to mortgage his property, the distinction between his function and that of the capitalist becomes yet more apparent. The owner of the mortgage is not the owner of the property, but only of a claim upon the property, and his income is interest plus an element of profit so far as risk is involved and rewarded. The gross income the giver of the mortgage derives from the property is the value of its use, and this gross income, and not the interest on the mortgage (even when the property is mortgaged to its full value), is an element in the cost of production to the enterpriser who utilises the fixed capital involved. The interest on the mortgage is a cost to the mortgager only. Just as the enterpriser who employs his own capital must be regarded as loaning it to himself, so the landlord who owns his land must be regarded as loaning to himself the

capital invested in his land. To both of them interest is a cost to be deducted, in the one case from gross profits and in the other from gross rentals. Just as profits may more than cover interest charges, so rentals may also—or they may both be less. The point of theoretic importance is that rentals, as well as profits, are regulated by different laws or tendencies from those governing pure interest.

As there are many ways of securing any special result, it is evident that some of these ways will involve on the one hand more effort in the establishment of space or place relations than others, and on the other hand a longer interval of time—that is the establishing of more or longer time relations—than others. The enterpriser able to accomplish his purpose in the shortest interval of time and with the least effort in the establishment of space relations, or at the lowest joint cost of both, will manifestly have an advantage over his competitors, and will pay something for the opportunity. What he pays for is neither a space relation nor a time relation, but the privilege of partly avoiding the establishment of both or either of them—or in other words a "relation of advantage." Such opportunities, or advantages, may be embodied in material things such as land, water power, mines, factories, tools, machines,

or dwellings; or in immaterial things such as a secret process, an idea, or a privilege conferred by law, or even one conferred by custom; but while the permanence of an advantage is affected by the nature of its embodiment, its character is not. The obtaining of the advantage, conferred by these embodiments of opportunity, sometimes involves, to be sure, the establishment of other space relations and time relations; and retaining them for use always involves the further establishment or preservation of time relations; but, further than the fact that they will not be so invested if the value of the advantage conferred is less than the cost of establishing the involved time and space relations, plus a normal profit to cover uncertainties, the limit of what the enterpriser will pay for them does not depend upon their cost of production, but upon the advantage they will give him over his marginal competitors, less any advantage he had before; or if there are no competitors, as is the case in individualistic production, upon the saving from his own previous cost of production. In other words, as the creator of an opportunity would not have appropriated it if he had not believed he would better himself, there is always an element in its value that has been obtained in excess of cost, inclusive of a normal profit—that is, opportuni-

ties are always partly made and partly seized; and the proportion between the two factors may vary in each instance to the extent that either one of them becomes an almost negligible quantity. Thus unimproved land and patent rights are almost entirely appropriations, while a carpenter's tools or the machinery of a factory seldom possess much value above their cost of reproduction. That, however, the two extremes belong to the same category is shown by the fact that circumstances are constantly occurring in which the almost negligible quantity of the latter is, as it were, resurrected—as when a sudden change in trade conditions enables an owner of machinery or tools to exact a monopoly price for their use, or to sell them above cost of reproduction. But that opportunity furnished is the essential characteristic of all implements —all "fixed capital" as well as land—is still more strikingly shown by the fact that their owners, unless desirous of quitting the business, would not part with them at the cost of reproduction unless they believed themselves able to replace them with other similar implements at or below the price they sold at; whereas the owner of a commodity held for sale and not for use would still part with it at its market price (or cost of reproduction), although he believed he could not make or buy a

duplicate at or below the price at which he sold it.

The principles governing uses are not at all altered by the facility afforded being an absolutely essential one. Many products cannot be produced at all except by the use of land. Land is therefore an absolutely essential facility. The same is true of the facility afforded by patent rights, when the patented article or some substitute can be produced in no other way. If the whole earth were owned by one person, or by a combination of persons, and the patented article were an essential of life, both these facilities would, in a certain sense, be absolute. Short of this however they are relative, just as all other advantages in production are, and subject to the same general laws or tendencies, although of course in some minor particulars the tendencies affecting them may differ.

The result of every human volition is therefore a product, the creation of which involves the establishment of one or more of three kinds of relations—namely relations of place or space, of time, and of advantage. When the product has no material embodiment it is correctly spoken of as a service, and as a commodity when it has a material embodiment.

Services can be rendered either to oneself or

to another. When rendered to oneself they may be either psychical or physical. In the first case they are thoughts or emotions and result from the juxtaposition or association of ideas, and the only subsidiary productive factor involved is that of mental labour. In the second case, where they affect the body, muscular labour and therefore physical effort is necessary. And when, to facilitate the creation of the necessary space relations, a tool is employed, an advantage is appropriated, an abstinence, covering the making and preserving of the tool and preserving the raw material, exercised. Thus all four of the productive factors are brought into play by so simple an individualistic act as fanning oneself with a home-made fan.

When an unaided individual makes a purely hand-made article for his own future consumption, we have a commodity in whose creation enterprise, labour, and capital have been involved, and opportunity also when the article is tool- or machine-made.

The peculiarity of individualistic activity is that all the four productive functions are exercised by the same individual, to whom the entire result accrues without any deduction of what has to be paid to others. Consequently the care of the creator of the product

is not at all that his share as an enterpriser should be relatively large, but that the total result due him for exercising two or more of the productive functions should be as great as possible. The motives governing his final volition may have their origin in four distinct sources, between which however he does not distinguish. His sole interest is in the final result, and, provided that is obtained with the least possible sacrifice on his part, the proportion in which it is to be attributed to each one of its four sources is not only a matter of indifference, but impossible of any solution at all accurate.

The individual however is far from indifferent as to whether he can secure greater and better results by combining his activities with those of his fellow-men. A very large proportion of desired benefits are better reached by individual effort, and a very considerable proportion can only be so obtained. We have to think out our own thoughts and feel our own emotions. The words of others, spoken or written, aid to be sure by suggestion, and when they do, if they have cost us anything, such as the price of a book, the resulting ideas and emotions would be products of combined activities were it not that we should consider the book as becoming an individualistic com-

modity when it was bought or rented for private use. The moment anything passes into the hands of its final consumer, or user to consume the result, it becomes an individualistic quantity, no matter how it originated. Its disposition thereafter is a matter entirely personal to its possessor. Individualistic activity is purely personal both in its object and in the methods adopted to secure the object, though, as we have seen, it can, and does, avail itself of productive factors of the same general character as the other productive processes, and also of the results of economic and social endeavour.

Services are also rendered by one person to another, or by land or "fixed capital" owned by another, and are then of course products of the combined activity of different individuals, and, as such, are not individualistic at the time of rendering or sale, but become individualistic after the transfer—as is also the case with all commodities in the hands of their final consumer. How the final purchaser utilises his purchase is a purely personal matter. Individualism as a science has for its subject all uncombined activities—all the daily actions of home and private life—which taken in mass greatly outnumber combined activities; which latter, however, gain in relative importance

from the fact that they furnish the basis without which the greater part of present individualistic activities would be impossible, as they bring within the consumer's reach the economic and social products essential to the very existence of much the greater part of his individualistic actions.

When the individual seeks his personal ends by combining with others, the question of the division of the product at once arises. If the products are thrown into a common fund, from which each one helps himself as occasion offers, a process which is at present applicable only to a limited kind of products, such as a public park, or to the various services rendered by the state, or if the division is a pro rata one, the incentive to productive activity is weakened proportionately to the size of the group. It will work well enough in a partnership of three or four, especially when they all contribute the same productive factor, because they naturally watch each other, and are aware of their partners' productive value, and either dissolve the firm or change the division of the gains if any member fails to contribute about his quota to the results attained. This mutual judgment and ability to rectify errors in judgment becomes more and more difficult as the size of the group and the diversity in ability and

function of the individuals composing the group increase, and a corresponding decrease in productive efficiency is of course involved. It is practically impossible to form combinations of this kind between persons exercising different productive functions unless, as in farming on shares, each group is very small. Moreover in many cases the product of combined efforts is not a divisible one, nor is it always something the joint producers can either use personally or exchange. An actual division of the joint product is in many cases impossible and in other cases inadvisable.

Nevertheless there is considerable field for combination founded upon a division of the actual product more or less unrelated to productive efficiency. The principal instances have already been mentioned, and it is to be observed that in such combinations as partnership and farming on shares, which is also really only a form of partnership, it is only the contribution of each partner to the general result which is lacking in the prearranged definiteness which marks an economic combination. If we regard a partnership as an economic person, its relations to its environment are purely economic. In what degree its internal relations are also economic depends upon the degree of definiteness with which the interest of each partner is

proportioned to and varies with his productive efficiency. If the group is small or if, as in a stock company, each contributes definite amounts of the same productive factor, this definiteness is practically entire, but the larger the combined group, and the more diverse the functions exercised by the contributing individuals composing it, the less definite becomes the relation of the reward to the contribution —that is the internal relations of the group become more social and less economic.

A wider field for production, under the incentive of a non-prearranged division of the actual product, is to be found in the operations of the state and in other large social bodies. Here we have products such as a public park, or a free concert, and the services of courts of justice or the army, paid for out of taxes, and enjoyed not only by the contributory taxpayers but also by the whole population as they please and as it happens, subject only to such regulations as the state imposes.

Lastly we have municipal or state ownership and operation of public utilities, in which the state assumes the function of enterpriser but not for the purpose of reaping a profit—the natural reward of enterprise—or if a profit is sought it is usually a monopoly profit, founded on the monopolisation of pre-existing facilities, and

more in the nature of a tax than a legitimate return to enterprise. We have already had occasion to observe that a monopoly of this character is especially detrimental, as the sum-total produced and enjoyed by consumers is necessarily decreased by raising the price of the product above its natural level, and the injury inflicted upon the community is always greater than the extra revenue derived by the state, and is never compensated, as is the case when private individuals seize upon a neglected opportunity, by any gain in productive power. When however the assumption by the state or city of any branch of industry is not for the purpose of obtaining a monopolistic gain, it may be highly advantageous to the community as a whole. A private enterpriser may indeed be a philanthropist, and earnestly desire to benefit the contributors of land, capital, and labour, especially the latter, as well as himself, but, unless all the other enterprisers in the same line of trade are like minded, he places himself at a competitive disadvantage that will eventually eliminate him as a producer. Consequently he will get what he can from his business, and bestow in benefactions such part of his gains as he feels he can spare without perceptibly crippling his productive efficiency. Every enterprise has a complexity of results, only some of which are

economic and have a market value. The enterpriser, as such, will take no account of these incidental results of the occupation he is engaged in, except as they react upon his cost of production. If his business is an unhealthy one he will indeed be forced to pay higher wages, but he will give no thought as to whether the wages he is forced to pay are high enough to compensate his workmen for their maimed bodies and shortened lives. And if his business is a more or less disreputable one, because injurious to the community, and involving therefore some loss of social prestige, he will utilise that circumstance to extort a higher rate of profit for himself. When therefore a business has non-economic results either good or bad, its assumption by the state, with the object in view of intensifying the former or diminishing the latter, is justified, even when it is attended by some loss of economic efficiency. The more equable distribution of wealth however, should not, it seems to the writer, be reckoned among the incidental benefits justifying public operation. Profit is the mainspring of all human endeavour, and any interference with its legitimate expectation strikes at the very root of enterprise itself, and clogs progress by lessening its incentive.

Combined social activities are of two kinds.

In the one the product is distributed without charge, and in the other it is sold just as an economic product is. About the former no difference of opinion is likely to arise, and it is only necessary to observe that the real contributor of the means of production is the taxpayer, and not the capitalist, whose funds the state borrows, or the labourers, such as judges, legislators, soldiers, and policemen, that it hires. Their productive activity is of course economic because they perform their part in a combination of human actions for a purely personal and predetermined reward, which is not however a part of the purchasing power to whose creation their efforts have been directed, because no such purchasing power is created, but a part of the purchasing power contributed by the taxpayers. The product itself is purely social, and cannot therefore be distributed in prearranged proportion, nor can its purchasing power, for it has none.

When the product is sold the case is somewhat different, and the combined activity has some resemblance to economic if we consider the state as an economic individual. Nevertheless the activity remains a social one despite the fact that it is not the tax-payers, but the purchasers of the services and commodities sold by the state, who furnish the fund from which the state

pays its wages, rents, and interest charges. This case differs from the first only in the fact that the buyers from the state, as well as the employees of the state, are governed by economic motives. But as the enterpriser is the only real producer, it is the state alone which is the producer of products of this character, and as the state despite its charging a price for its products is not governed by economic—that is personal—motives in fixing the price, such a productive process is not itself economic. To which an exception cannot even be made in the hardly conceivable case of the state's conducting its enterprises on strictly business principles, and wholly for the profit to be obtained, without any consideration for social or ethical ends, or any desire to modify distribution; as the profit of enterprise is economic only when it is a prearranged personal share of the purchasing power created. The gain of the state from any enterprises it conducts cannot be personal, for even when the state has no social or ethical ends in view any purchasing power that accrues to it from business enterprises conducted by it is necessarily devoted to a lessening of taxation, and the ultimate gain does not really accrue to the state but is divided in unpredetermined proportions among individual taxpayers, who, as individuals, have nothing to do with the creation of

the state's profit. The motive of the state is therefore necessarily impersonal, or social, in all such cases, and consequently any productive process conducted by it is social also. In the rare cases in which a despot, in control of state action, carries on an industry solely for his personal benefit, the business becomes a personal undertaking, and if social in form is not so in substance.

It is plain therefore that in social activity, as in individualistic, there is no proper differentiation of the dominant productive function. All that either the state or the individual is concerned about is the gross sum of well-being to be obtained, and they are alike indifferent as to the form of income in which the benefit appears or to its being proportional to contribution. Though always the ruling factor, enterprise is not dominant in the sense of governing the others for its own benefit alone, and sacrificing the interests of their possessors, when they conflict with the interest of the enterpriser. There is also no standard by means of which any one can discriminate and compare the different parts. What proportion of individualistic and social products are properly attributed to efforts exerted, what to abstinence, what to the possession of facilities, and what to the irksomeness of responsibility cannot be calculated in any but

the vaguest way, and that only by borrowing the use of the standard afforded by purchasing power, which is only applicable by analogy to things not intended for exchange and not at all to results not susceptible of exchange.

It is just this lack of quantitativeness which makes the sciences of Individualism and Sociology so dependant upon the science of Economics, which is possessed of a quantitative standard applicable by analogy to some individualistic and social results. The borrowed standard is indeed a very inadequate one, so that the ultimate appeal of those sciences must always be to the individual consciousness. These individualistic valuations of individualistic and social results are constantly being made by every one, not only as a guide to his own actions, but also as a means of influencing social results so far as he has a voice in their determination.

The understanding therefore of the interplay of the productive factors, impossible of being attained except through Economics (because in economic activity alone the functions of these factors are clearly differentiated and possessed of a common denominator), is a prerequisite to any proper comprehension of individualistic and social activities. If the principles here enunciated are correct, it will hardly be claimed

that a satisfactory comprehension of these functions has been arrived at in the present state of the science of Economics. The distinctions universally regarded as fundamental are those between the productive factors, and not those between the productive functions. As at present viewed, once a factor of a certain kind, always a factor of that kind, even when the function performed has been changed. Thus slaves are still labourers, capital invested in land improvement or even in land creation is still capital. More than all, anything that can be capitalised is capital, that is anything such as good-will or a patent right. Even land is regarded by some as capital, because it has a selling price the interest on which is equal to what its use is worth (a false assumption by the way, as the interest on the selling price of such things is never so great as the value of the use, as allowance is always made for the extra risks attendant upon ownership). The fact has been ignored that when labourers are enslaved, or when capital has been expended upon land, a change of function has occurred, and that when good-will, or patent right, or land have been capitalised, there has been no change of function. Misled by these assertions, popular usage has gone so far as to speak of the bodily or mental powers of the labourer as his capital.

Economists have not indeed gone to this extreme, but it is difficult to give any reason why this popular expression is not as logical as those just stated, which they certainly do make. And as a matter of fact the power to labour is sometimes capitalised, as when a stock advances in price when a new manager, known to possess exceptional ability, is secured. Furthermore it is currently assumed that capital is a sum of material things, although the income arising from the possession of material things is always either a rent or a profit and greater or less than pure interest, and never averages the same as pure interest.

Manifestly we have here some very serious confusions of thought, intensified and perhaps partly due to the further fact that economists universally regard the four productive factors as standing on the same plane. That they have failed to recognise the predominance of the enterpriser is undoubtedly attributable to the true character of the function he exercises having been misapprehended. Looking upon him as a co-ordinator connotes that his function, like the others, is only a means by which the ultimate purpose of production is attained. It has not been perceived that he is only a co-ordinator in the sense that he directs co-ordination for his own benefit, or rather is co-ordinated for. He

is the principal, they are the agents. Co-ordinations of place or space, of time, and of advantage are only the means by which he attains his end, which is to subject himself to the benefits of ownership with its attendant responsibilities; and to define the enterpriser by one of the means he uses when those means are various, and not by the motive which prompts him, is to violate two of the most obvious principles of classification.

Economists are however hardly blamable for these misconceptions, as they, or others like them, were sure to arise from the attempt to define functions in terms of the productive factors which exercise or perform them. The error is only one of omission—a failure in perception—and if scientific men were omniscient in perception every science would long ago have been brought to perfection. A man is a ploughman because he ploughs, but the converse proposition that because a man is a ploughman what he does is ploughing does not hold. When the ploughman sows or reaps he becomes a sower or reaper. As he changes the function he performs, he changes his character as a factor. It is the function performed that makes the factor, not the factor that makes the function. Factors must be defined in terms of function, and when the function is a means, both it and

its factor, must be defined in terms of their relations to the employer of the means. Such factors must be distinguished by the kind of use to which their employer puts them. When we seek to understand the function by studying the characteristics of the factor we put the cart before the horse. We are endeavouring to arrive at true conceptions by means of the inductive, empirical, and historical method, proper to the natural sciences, instead of by the deductive, logical, and "orthodox" method proper to the moral sciences.

The true character of the productive function of the enterpriser once recognised, the whole subject is cleared up at once and we are able to view the productive process as a consistent whole, and by defining the three subsidiary productive factors in terms of their relation to enterprise, their employer, we are able for the first time to determine accurately what their productive functions are; namely the establishment of space relations by physical, and place relations by mental, labour; of time relations by capital; and of relations of advantage, or competitive relations, by opportunity. We also recognise that to a certain extent the subsidiary productive factors are interchangeable, or convertible into each other, whenever enterprise changes the use to which it puts them. The

difference in conception is perhaps most vividly illustrated by the classification of "fixed capital" as "land" (if the old term is to be retained) as contrasted with the growing tendency to class "land" as only a form of capital because it has a selling price, or in other words because its value can be capitalised, or capital invested in land. To call the thing in which capital is invested capital is an especially naïve contradiction of terms. But the attempt to bring land within the capital concept would never have been made by any one who recognised that it was the use the employer had for each which was fundamental.

Our conception of the productive process also discloses for the first time clear lines of cleavage between individualistic, social, and economic actions. The distinction itself has been universally recognised for ages, and its validity has never to my knowledge been called in question, but neither has any successful attempt to obtain definitions which discriminate the three methods of human activity been made. I cannot but feel that this is owing to the insufficiency of the prevailing conceptions of the productive process, and especially to the confessedly undeveloped state of the "Theory of Enterprise." As to the conception of the productive process here presented, whether it be finally accepted or not, it

certainly discriminates clearly between the three universally recognised methods of human activity, and thus affords a final and precise definition for each of them, which there is a logical necessity of accepting if my premises are well founded.

Again, the treatment of Economics as a science primarily concerned with the productive factors, rather than as concerned with a certain form of combination among individuals exercising distinct productive functions, made a definition of the science impossible, as it led to the tacit assumption that land, labour, capital, and entrepreneurship were purely economic terms, whereas they are really essential to all human activity, individualistic and social as well as economic. Considering them as purely economic terms is practically to define Economics as an aspect of all human activity, and it is not only always difficult to define an aspect, but also not of much use when it is accomplished, because it is constantly varying in degree.

The dominance of enterprise in the sense of its being the employer and director of the other factors once admitted, I do not see how any one can deny the logical necessity of defining the three subsidiary factors in terms of their relations to it, that is in terms of the use their employer has for them. As we have

seen, this affects somewhat our conception of labour and radically changes our conceptions of capital and land. But it does much more than this in enabling us to understand the manner of their origin in the laws governing appropriation, accumulation, and population. The latter has indeed been ably discussed by Malthus and others, so far as it was an individualistic matter, and some attention has been paid to the effects of prosperity and hard times upon marriage. But the response of population to the demand for labour exerted by enterprise has not, so far as I know, been considered. And the same is true of the response of opportunity and capital to the like demands of enterprise. No one seems to have had even a suspicion that any permanent industrial effects can follow from the three responses not being equally quick. As we have shown, they differ greatly in this respect, with the result that two derided popular opinions are seen to have a solid foundation. I refer of course to the ideas of a general glut and a favourable balance of trade. If the field for investment is dependent upon the growth of population and advances in the arts, which is another phrase for the growth of opportunity, it is surely evident that it may not widen fast enough to enable enterprisers to find profitable employment for accumulating

capital. In a progressive country this certainly occurs, and there is therefore a periodic increase in the pressure of capital upon its limitations, adjusted not, as economists seem to take for granted, by capitalists obtaining a lower rate of interest, but by a cessation of production sufficient to check accumulation to a point where existing capital can be employed at the previous rate of profit and interest, or rather sufficiently above that rate to compensate enterprisers for their losses during the preceding period of industrial depression.

The importance of this fact to the practical application of economic theories can hardly be overestimated. It explains the periodicity of industrial activity, the persistent belief in an excess of exports being favourable to a nation—the explanation of which is that home capital is supplanting foreign capital either by investment abroad, or by taking the place of foreign capital at home, thus allowing accumulation to continue and enabling labour to obtain fuller employment. It explains also the value of colonies, in their possession leading to an export of capital. It reverses also the prevailing idea that industries requiring much capital are monopolised by the prosperous nations because they are rich, and it is seen that these nations are rich because they have been forced into

manufacturing and commerce by their poverty in agricultural resources. It shows also how the policy of protection can, theoretically at least, benefit an agricultural country by diverting its labour from the soil to the arts. Surely it is not without significance that all the above-mentioned popular beliefs which have been so persistent, derided as they have been by scholars and unsustained by convincing arguments are now found to rest upon a valid scientific basis.

It is with great reluctance that I appear as an advocate of these "discarded heresies." I know how others have fared who have championed them, and that "that way oblivion lies." They appear however as legitimate corollaries of my original premises, and as such they must be honestly stated, even if this leads some to reject the premises (in the establishment of which my real interest lies) because of the final conclusions to which they lead. I would state however in mitigation of my offences, that the reasoning advanced in support of these conclusions is new and is by no means the purport of my argument, but only incidental to it. I fail to see how these conclusions can be avoided when economic phenomena are viewed from the standpoint of the enterpriser. That standpoint, which no one could be ex-

pected to take before the peculiar importance of his function was recognised, and which no one so far as I am aware has previously taken, is certainly a legitimate one, even if it be not granted me that it is the only proper one; and if our vision from it be really distorted, to what the distortion is due remains to be shown.

There is usually a kernel of truth, overlooked by scholars, in any popular conception or misconception, which persists in spite of disproof. The unconscious cerebration of mankind is rarely wholly in the wrong in its final results, however inadequate and inconclusive the arguments popularly advanced in support of its conclusions may be. When therefore a scientific theory, especially one developed with no ulterior purpose in view, furnishes a corollary which supports a popular opinion, hitherto controverted by scholars, the theory should not be condemned on that account. On the contrary, that it endorses the popular conception and explains its persistence under adverse criticism, should create some presumption in its favour.

In closing this chapter I wish to call attention to the circumstance that the conception of the productive process advanced is not subject to the criticism rightly applicable to a good many economic theories advanced in the past, that in

studying the economic process from the point of view of the individual participant we lose sight of the wider relations between that process and the community at large. These wider relations are usually spoken of as "Social Economics" or "National Economics." We now see, to be sure, that neither of these terms is very exact. Granting the distinction we have drawn between social and economic effort, the two terms are hardly susceptible of being conjoined in the sense in which the term "Social Economics" is usually employed. Neither can we correctly use the term "National Economics" except as confined to covering the total creation of purchasing power within a nation, and this excludes a good many elements of the national weal. Nevertheless there do exist relations, and very important relations, between the total accomplished by the economic activities of individuals, and the welfare of the community as a whole. But it must never be assumed that the economic success of individuals, or even their average economic success, coincides with the degree of welfare the community enjoys. This unwarrantable assumption was made by the Physiocrats and Mercantilists, and was conjoined with the additional error of assuming that economic success was only the success of a certain class of producers, sometimes, as suited their

argument, the receivers of profit, and sometimes the receivers of the rent of land, and sometimes the accumulators of wealth—as the word "surplus" was used by them with each of these connotations. Adam Smith shook himself free from most of these ambiguities, but not wholly so, as it is evident from the title of his book, *The Wealth of Nations*, that he regarded its accumulations as the measure of a nation's economic well-being. The underlying premise of the dogma of *laissez-faire* is the affirmation that any good obtained by an individual as the result of legitimate economic effort is necessarily an addition to the "weal" of the community, which is a practical denial that individual economic weal has any relation to the weal of the community other than being included in it. The present conception of the productive process goes a step beyond Adam Smith and a step farther away from the "Pre-Adamite" conception in recognising that the well-being of society, or of the nation, is not the sum-total of the economic well-being of the individuals composing the society or the nation. Practically viewing Economics, however they define it, as the science concerned, not with a special class of human activities, but with the productive aspect of all human actions, Economists are at sea and really accomplish

little when they endeavour to discover the relations of economic weal with individualistic and social weal, or to the total weal of the community, which must include all three. Individualistic and social "weals" are products, but if Economics is the science concerned with the productive aspects of human actions, every product must be an economic one, whether it be individualistic or social or industrial. Of course a science could be constructed on this basis and dubbed Economics, though that would violate all our preconceptions of the meaning of the term. It would really be the science concerned with the laws governing volitions in general, and would tell us nothing at all of the influences special to each method of production—which is the knowledge we are mainly concerned with, to enable us to apply our knowledge to the ordinary and practical affairs of life and to enable us to understand the mutual relations of individualistic, social, and industrial conditions. Economists have been trying to ride two horses at once, and, while their definitions have been prancing in one direction, their practical conception and treatment of their subject has proceeded in another. While their formal definitions are largely founded upon the idea of the science as concerned with productivity in general, their treatment of the subject is, in the

main at least, confined to a consideration of industrial production. Of course I do not mean to assert that economists have been wholly oblivious of the various distinctions here advocated. They have been in the air and have greatly influenced their treatment of the subject, but they have never been discerned clearly, much less accurately formulated, and in some instances have been formally denied at the same time that they were unconsciously utilised.

Now the conception of the productive process here advocated, while it recognises much more fully than the present one the one point of truth in the "Pre-Adamite" conception, namely, that the entrepreneur or enterpriser occupies a unique position in industry which puts him in a different class from the other productive factors, making him dominant in the sense that the conduct and direction of industry is confided to him, really progresses one step farther away from the 'Pre-Adamite' conception than the Adamite or Post-Adamite conceptions, which regard the "surplus" simply as a part of the total weal of the community, by disclosing and emphasising the fact that the smaller the relatively necessary "surplus" the greater the total economic weal (and, by inference, the social and individualistic weal also) of the community will be. Disclosing, for the

first time, that accumulation finds its limit in the uses to which the entrepreneur is willing to put it, and that the response of the subsidiary factors to the demand of enterprise is not equally quick, it shows us that, while the prime essential of industrial prosperity is that enterprisers obtain a satisfactory profit, the less the enterpriser and accumulator can be induced to content themselves with, the wider the field for investment will be, which must result in a fuller employment of labour, a greater accumulation of capital, a larger availment of opportunities, and a widening of enterprise, eventuating of course in a greater total of product, and a greater total of weal for the community, provided individualistic and social weals have not been sacrificed for the economic to too great an extent. So far, therefore, is enterprise from being dominant in the Pre-Adamite sense of being the final object of social regulation and the measure of prosperity, that the truth lies the other way, so far as its permanent relation to the other factors is concerned. In the temporary and fluctuating relations it is indeed dominant, in that the direction of the course industry shall take is intrusted to it, so that it insists on, and succeeds in, obtaining the normal rate of profit, taking one year with another, but it is itself dominated by the consumers—that is

by the community as a whole—which is amply protected against the normal rates of profit and interest being exceeded on the average by the marginal enterpriser, and the marginal capitalist, by the competition of enterprisers with enterprisers, and of accumulators with accumulators. Society is not similarly or equally protected against the owners of opportunities, although the encroachments of monopoly do release certain re-adjusting forces which at least limit them, even in the case of a purely artificial monopoly.

Our conception of the productive process emphasises, much more than the prevailing conception, the fact that economic procedure is only one of three possible methods of attaining desired ends, and that the total weal enjoyed by society must not only include weals acquired in all three of the possible methods, but also depends upon human efforts being divided among these possible methods in such proportion as will result in the greatest combined aggregate of the three kinds of weal, and thus affords us a solid foundation on which a true theory of state interference with individual initiative can be erected.

The subject is too broad and intricate for further discussion in this treatise, but surely the conception of the productive process we have

arrived at affords for the first time a secure basis for deductions concerning the relations of the three methods of human activity and for determining the principles governing the moral right of the state to stimulate, regulate, or prohibit the different forms and degrees of individualistic and economic production, and for informing us in what instances, and to what degree, the substitution of social for individualistic or economic methods is advisable.

Any conception which is not an evolution from previous conceptions should be distrusted. I have been at pains therefore to point out, both elsewhere and in what has just been said, that our conception of the productive process, although it differs quite radically from previous conceptions, is by no means revolutionary, and that it differs from them only in points where amendment is necessitated by the resolution of confessedly unsolved problems.

Lastly, I cannot but flatter myself that the definition of the science and the concepts of the three fundamental terms I have ventured to propose can be made distinct and intelligible to the man of ordinary culture who will not bother himself with the present technicalities of economists. Can we not indulge the hope that, when this is once accomplished, economic laws and tendencies will become so

comprehensible to him that he will apply them to the economic and social questions he is now so interested in? Will not economic science speak with an authority it does not now possess, and with a clearness and strength that will enable its voice to be heard even above the din of popular discussion. He is certainly a man of very mediocre intelligence who cannot be made to understand that Economics is concerned with the clearly separable group of human actions, due to the combination of individuals for predetermined personal purposes; and that when so combined the purchasing power created is divided among the combining individuals in accordance with the functions they perform: wages to those who change the form or place of matter, or who arrange ideas; interest to those who by refusing to expend purchasing power enable others to retain possession of products while they are being fashioned, or held for the convenience of the consumer, or while they are in use as facilities of production; rent to those who possess or furnish to others advantages by means of which the cost of production is lessened; and lastly profit to the one who, employing labor, capital, and opportunity as means, does not furnish a means himself but subjects himself to the conditions of the undertaking—all its risks, un-

certainties, and responsibilities. This conception of the productive process is certainly plain and intelligible, comprehendible by everybody, and when once comprehended it dissipates most of the ambiguities which now obscure the popular discussion of economic principles. Our conceptions of the productive factors and their functions once diffused it will be no longer possible for any one to believe that "labour produces all things." Such an assertion becomes ridiculous when it is recognised that labour produces in exactly the same sense that land and capital can be said to do—that is, as a means only. The fact that labour is an intelligent active cause, whereas land and capital are inert or acted upon, makes no difference so long as the labourer's intelligence is subservient to the one who employs him. His acceptance of a wage from another, necessarily, and in itself, assigns to that other all claim on the product itself. The production of anything connotes the purpose the product is expected to serve. Such purpose is necessarily that of the employer and not of the employee. Consequently it is the employer only who really produces. Labourers, therefore, have no "natural right" to anything more than the employer is forced to pay by the industrial conditions obtaining at the time, any more than capital-

ists can exact more interest or landlords more rent in the long run than these same employers can afford to pay them.

Again when the distinction between individualistic, economic, and social actions is clearly apprehended, the spectre of socialism, though it may not disappear, is robbed of its terrors. Once it is recognised that there are only three ways of obtaining desired ends—many of which ends can be obtained in two or three of the possible ways—it becomes a mere matter of expediency which way is selected. Each kind of endeavour has its sphere in which it is the most effective for human weal, and although these spheres cannot be accurately determined so that there is no doubtful borderland to each, it is only when manifestly in this borderland that a proposed change in the method of attainment permits of discussion.

The authoritative and unequivocable conceptions of economic fundamentals I have been labouring to establish, easily comprehensible as they are, must finally convince labour leaders of the absurdity of their present efforts to force the employers to content themselves with a smaller share of the product by increasing the risks and responsibilities which the exercise of their function forces them to assume. At the same time they point to the proper points of

attack and the means by which the labourer's share of the product can really be increased. First: by decreasing the risks of business. Second: by encouraging the appropriation of neglected and undiscovered opportunities. Third: by improving the environment of labourers, and so increasing their health, strength, and longevity. Fourth: by education, training, and anything else that increases the efficiency of labourers. Fifth: by restrictions on privilege, so far as that can be accomplished without interfering with the continued search for and appropriation of additional opportunities—so far, that is, as it does not discourage business men from entering upon new enterprises or expanding old ones. Sixth: by insisting that public indebtedness shall not be increased for unproductive purposes, except of course when the exigency is imperative. Seventhly, and lastly: by the assumption by the state of such enterprises as, all things considered, can manifestly be better conducted socially.

Whenever the common consciousness of that more intelligent portion of the community, which under any régime will control and direct social customs and state action, can be brought to understand and accept these fundamental conceptions, we should be able to rely upon an

intelligent and beneficial direction of economic and social evolution on the whole, for though mistakes will of course be made, why they are mistakes will shortly become self-evident.

On the other hand so long as the present ambiguous conceptions of the productive factors and functions remain prevalent, and so long as no distinct lines of cleavage between individualistic, social, and economic actions are recognised, economic and social development cannot be very intelligently directed. And when mistakes are made, as they inevitably will be in great numbers, the means of discovering why they are mistakes and whether they should be entirely recalled or only modified will be lacking, just so long as our teachers are unable to explain to us the precise content and the unequivocal and indisputable meaning of the fundamental terms they employ.

CHAPTER XI

TRADE-UNIONS AND STRIKES

THE term "wages" is properly used in four significations, but I fail to remember any discussion of the labour question in which these four senses are carefully discriminated. Indeed only the terms "money wages" and "real wages" commonly come to the front, and the latter term is always, or nearly always, used with what seems to me an erroneous content.

We have first "money wages," or the labourer's daily reward computed in currency; second "proportional wages," or wages computed in the percentage that accrues to labourers of the value added to the product; third, the amount of consumable commodities that the money wages received by a fully employed labourer will procure. This is usually, but erroneously, spoken of as the "rate of real wages," but which, for lack of a better term, I propose to speak of here as "commodity wages." Last, we have what are truly "real wages," those measured by the consumable

commodities which the average money wages of labourers, taking the employed and the unemployed together, can command. In other words, I shall consider "real wages" as the average of wages, measured in commodities obtained by the class as a whole, and not as the average obtained by those of the class who are fortunate enough to be employed.

This distinction becomes of great importance because of the comparative inelasticity of labour force, to which we have already called attention. Sudden changes in the number of available labourers do not occur. While enterprise, opportunity, and capital adjust themselves to the fluctuating conditions of business by changes in their amounts, increasing or decreasing in comparatively quick response to an increase or decrease in the demand, there are practically just as many available labourers competing for employment when business is dull as when it is active. So far as the supply of labourers is affected by the demand for labour, it is only by the average of such demand over a long period of time, during which several alternations of industrial depression and prosperity may occur.

According to the present way of regarding this matter, the necessary adjustment by which the inelastic labour force fits itself to changing

conditions is afforded by variations in the rate of proportional or commodity wages, which should therefore fluctuate more violently than the forms of income accruing to the other three more elastic productive factors, an increase in the demand for which is partly at least met by an increase in the supply. But even a superficial view of the matter hardly seems to lend confirmation to this view, in the observed fact that, though money wages do decline in hard times and advance in good times, they do not fluctuate as much as general market prices. Labour is often spoken of as a commodity. But if the term be permissible at all, it is a commodity of inelastic supply, and differs from all other commodities of inelastic supply in this very important particular. A rise in the money price of any article of the latter is accompanied by an increase in the purchasing power of each of its units, whereas a rise in the money price of labour is not coincident with any increase in the general purchasing power of each unit of labour, because the purchasing power of all commodities for which money received as wages is expended depends so largely upon their money cost of reproduction, which is necessarily increased in just the same proportion as the general rate of money wages is advanced. Further analysis of the situation also discloses

a number of anomalies. A general rise in "money wages" can occur only after a rise in the average price of commodities, which has accrued as an extra profit to the enterprisers, they being the owners of all salable goods. This, of course, means that the rise in "money wages" has been preceded by a decline in "proportional wages" and also in "commodity wages." Indeed, the enhanced cost of living is usually the ground for any successful claim for an increase in "money wages." Of course the immediate effect of an increase gained in "money wages" is to raise both "proportional" and "commodity" wages, until the gain is lost by the inevitable rise in general prices. While general prices continue rising, the advance in "money wages" can never bring "proportional" and "commodity" wages much if any above the point at which they stood when the market for commodities first commenced to rise, and that only temporarily. If the labourers use their additional "money wages" for the purchase of consumable goods—as they surely will, for by our supposition their "commodity wages" are still somewhat less, or at least no more, than they were before the general market first commenced to rise,—the increase in the extra money demand for consumable commodities will cause another rise in general prices. so that very

shortly "commodity wages" will be no greater than they were just before "money wages" were advanced. And so, *ad infinitum*, so long as the demand for consumable commodities is not decreased by some class of the community lessening their demand for them by saving more capital than can be invested without depressing profits and interest. This circumstance, which marks the culmination of the rise in general prices, by causing "capital goods" to accumulate, will prevent a further advance in the prices of consumable commodities, and interfere with the tendency of the purchasing power of money to decline as money wages, advance or remain stationary. But it will also though somewhat later, check the further advance of money wages, and even cause them to decline as the accumulation of uninvestible capital continues, and, because it lags behind them, the decline in money wages will be accompanied by a corresponding rise in both proportional wages and commodity wages. The intensity of the demand for any commodity is dependent upon its relative scarcity, while the intensity of the demand for labour depends upon its relative scarcity only so far as its money price is concerned, and as it is only when the purchasing power of money is reduced, that is when prices are high and profits

great, that the demand for additional labour force arises, it follows that instead of the inelasticity in the supply of labour force being adjusted, as is the more temporary inelasticity in the supply of any single commodity, by an increase in the purchasing power of each unit, corresponding to the increase in its money price, the purchasing power of a unit of labour does not correspond to the increase in its money price. As a matter of fact so far are they from corresponding that an inverse ratio obtains between them, except during the short period marking the culmination of a rise in general prices, when for a short time both money and commodity wages may remain stationary, to be followed by a longer period during which commodity wages increase while money wages remain stationary or decrease. Up to that time an increase of money wages is not accompanied by a corresponding increase in commodity wages; after it the latter increase despite any decrease in the former.

Nor is the see-saw between money wages on the one hand and proportional and commodity wages on the other at all affected by the employment of idle labour, so long as no additional accumulation of capital is made beyond the amount required to furnish tools, and to carry goods in process and in stock for the

additional labour force, as in such cases the additional supply of consumable commodities affords an exactly equivalent demand for them. Therefore the rate of profit and general prices will be unaffected by this circumstance, as well as money, proportional, and commodity wages, except of course to the extent in which the proportion of the total product accruing to opportunity and capital happens to vary. How the proportions going to rents and interest are affected by rising and falling prices of commodities, and by the increased production above referred to, is an interesting but very complex subject which we cannot enter upon at this point (as such fluctuations do not affect the validity of the theory here advanced, but only modify its practical application), further than to say that what influence they have expends itself directly upon profits, and only indirectly affects wages to the extent in which the increase or decrease of profit influences the employment of labour and general market prices.

Coming now to the consideration of "real wages," that is the total amount expended in wages, the purchasing power received by the labouring class as a whole, we are enabled to see that a general rise in the price of consumable commodities, greater than the coincident rise

in money wages, operates in two opposite directions; it decreases the relative purchasing power of a day's wages, as that is connoted by a rise in the rate of profit surely attendant upon a rise in the market, but increases the number of days' wages received, as more labourers are employed when profits are large. There is no question about the latter being the more important influence, so that we are able to make the somewhat paradoxical statement, that the labouring classes as a whole are never so well off as when the individual labourer, who has had steady employment during the cycle of bad and good times, finds himself the worst off in that the purchasing power of his wages is the least; or in other words "real wages" are the greatest when "commodity," usually spoken of as "real," wages are the least. Taken together, employed and unemployed, the labouring classes are better off when enjoying a smaller proportion of a greater product, than when they obtain a larger proportion of a smaller product. A general rise of money wages is unobtainable except at the expense of a more than corresponding loss in the purchasing power of the total money received in wages, as soon as the market has adjusted itself to the new scale of wages, or at the expense of the amount of employment being lessened, if the market has culminated and does not adjust itself.

What labourers gain from a general advance in market prices as compared with the rate of money wages, is additional employment at the expense of a loss in the total purchasing power of a day's wages, however much money wages have been advanced. And if, as sometimes happens, money wages are advanced when market prices have culminated, labourers as a class are eventually injured, as they lose more from lack of employment than they gain through the increase in the purchasing power of a day's wages.

Under the most favourable circumstances, therefore, the attempt of trade-unions to benefit the labouring classes as a whole by forcing their employers to raise the money wages of either one class of workers, or of all classes of workers together, is as vain as the endeavour to soar heavenward by pulling on the straps of one's boots. Any group may succeed in benefiting themselves, and becoming as it were an aristocracy of labour, but it is wholly at the expense of the other groups of labourers, and any benefit the other groups obtain will be partly at their expense. Labourers are wrong therefore when they look upon the contest as one against capital, by which they really mean against their employers, the enterprisers, whereas it is really only an attempt to obtain a larger share of the

wages fund. It is indeed a fight against the individual enterpriser, who, even when he can raise the price of his product correspondingly, eventually sustains a very real injury from the restriction of demand for the commodity he produces, due to the rise in price necessitated by his being forced to pay higher wages. But this demand of which he is deprived is only transferred to commodities produced by other enterprisers, so that the class as a whole is not injured beyond what all classes suffer with them from industrial stagnation. Competition cannot arise between buyer and seller. It exists only between those who bring like goods to market, or who seek like goods in the market. The contest between buyer and seller is purely individualistic, and any advantage obtained by either does not eventually accrue to the industrial class of which he happens to be a member.

In this analysis of the labour question, I have so far disregarded the circumstances which are generally considered as modifying similar conclusions. It is usually assumed as a self-evident proposition, that, when wages are advanced in an enterprise whose product is wholly or mainly consumed by the rich, a substantial addition is made to the aggregate of wages wholly at the expense of the purchasing power of profits, interests, and rents. There are however grounds

for doubting the complete validity of this theory. It will readily be appreciated that, if it were known at the time of their creation just what products would be consumed by the rich, so that labour could exact higher wages for helping to produce everything that the rich consumed, perhaps none, and at least not all, of the advantage would accrue to labourers as a whole, as interest and profit would be correspondingly raised. The inducement to save and the inducement to hazard are personal, and would be correspondingly lessened by any loss in the relative purchasing power of interest and profits. As to rentals the case is different, as the cost of opportunity is usually so much less than its value that rentals would be increased only (if at all) in the proportion of the increased cost of reproducing opportunities. It must further be taken into account that if the prices of such things as automobiles, expensive furnishings, and works of art are raised by higher wages being exacted for producing them, some transfer of demand on the part of the rich will naturally occur, to the manifest disadvantage of labour, as such articles are usually produced by skilled labour, and as a consequence the ranks of labour will contain fewer highly paid skilled workmen.

Secondly, I have assumed the loss of the

labouring classes as consumers to be equal to any gain in money wages obtained. This is not exactly correct, as whether it is more or less depends upon what proportion of aggregate wages is expended for consumable articles and what saved and transformed into capital, as compared with the proportion which the expeditures of the other classes bear to their accumulations. As a matter of fact it is somewhat greater, so that the labourers' loss as consumers is greater than their gain from an advance in money wages. Assuming that the articles whose prices are raised enter in equal proportion into the consumption of the rich and the poor, and that the excess of savings over the intrenchment upon previous savings, taking one year with another, is entirely contributed by the rich, and that the total product is divided 65% to wages and 35% to other forms of income, and that 5% of the product is saved annually, the aggregate consumption by labourers of the commodities whose price has been raised by the same percentage as the increase in wages would be in the ratio of 65 to 30, so that the class as a whole would lose more as consumers than the special workers engaged upon the product in question would gain from the increase in their money wages. The average is re-adjusted however during the declining

period of industry, during which the labourers gain as consumers slightly more than they lose in the rate of money wages. It is of course to be remembered that the corresponding gains and losses are not quite simultaneous. At first, when money wages advance, there is a gain in aggregate real wages supplied at the expense of enterprisers, who however immediately proceed to recoup themselves by raising the price of the product, not only to cover their extra expenditure in wages but also to provide a profit on their additional outgo for wages and a profit on the enhanced value of capital, both fixed and circulating—which profit wholly compensates them as a class for any loss that falls upon them as consumers of a dearer product. They obtain also a further compensation, which, in the long run and on the average, fully offsets their subsequent loss when money wages and general prices are declining, in the enhanced value of the capital they employ—which value depends of course upon the cost of reproduction. Enterprisers do indeed lose by the extent of their undertakings being lessened when the advance in prices culminates and the reverse process sets in, but this, instead of being a gain to the labourers, is accompanied by a corresponding loss in the amount of employment which results in a net

loss in all incomes. In other words all classes lose by the non-creation of the additional product when business is bad, the only advantage to labour being the negative one that it does not suffer its full proportion of the loss.

Let us suppose, in illustration, a representative enterpriser who is paying his labour force 65% of the value he adds by his operations to the commodity he manufactures, distributing the remaining 35% in rent, interest, and his own profit. A general advance in prices occurs, so that at the time his hands ask for an advance of 5%, he finds that he can afford to give it to them because he is selling his product at an advance of 5%. At first sight it would appear that the employer was still better off than at first as $\frac{65}{100}$ of 5% is only 3¼%. But as we are supposing a general advance all along the line in both prices and wages, it is evident that it will take this 1¾% to pay for the increased interest and profit on capital now worth 5% more, and probably a 5% increase in his rentals also. In other words, a simultaneous advance of 5% in both wages and in general market prices leaves all classes just where they were before, proportionally, the only difference being that everything is on a higher scale. It is now as easy to get $1.05 as it was to get $1.00 before but it now takes $1.05 to buy what was

worth a dollar. While general prices are advancing faster than money wages there is a gain to the enterpriser, which of course is lost again during the period after prices have culminated in which both general prices and money wages decline, as the decline in general prices always anticipates that in wages. In the long run this gain and this loss must exactly counterbalance, both to the labourers and their employers, leaving the proportion of the product that goes to wages undisturbed for the whole cycle, though for a time each party gains at the expense of the other. Some may be inclined to think that if the period during which general prices were advancing faster than wages was shorter than the compensating period when they were declining more than wages, a larger proportion of the product would accrue to wages and a smaller proportion to enterprise. If this were true it would be unfortunate for the labouring classes as a whole, because it would mean a lower average of the number of labourers employed, which would cost them more than the gain in proportional wages. And it might be true if a single cycle of activity and depression alone was under consideration. Anything gained in one cycle, however, would be lost in another, as the general average of profit obtained must in the long run tend at

least to equal the expectation of profit that will determine the enterpriser's employment of labour, and any temporary variance that occurs will be as likely to be on one side as the other.

As a matter of fact, in a progressive country the periods of industrial activity must be longer than those of depression, because each cycle results in a permanent addition to the total capital fund which enterprisers are able to find profitable employment for, and this does affect the proportion of the product going to labour in two ways. The proportion is decreased by the disturbance in the per capita amount of capital, and increased by a decline in the normal rates of both interest and profit.

But it by no means follows that in other ways labourers cannot lose by an advance in money wages. If the rise is in an enterprise producing exportable commodities, it must have some effect in decreasing exports, and thus narrowing the field for investment for the nation's capital, and bringing nearer the time when enterprisers must needs decrease production to protect themselves, which entails of course some additional loss of employment. And when the price of the article produced is about equal to the cost of importation, a rise in money wages will lead to importation at the expense of home production, with a like effect

upon the field for investment and employment of home labour.

The great injury however which labour agitators inflict upon the labouring class as a whole is in the enhancement of the normal rate of profit, that is in the expectation of profit that will induce the marginal enterpriser to enter upon an undertaking, or to continue it in full operation. The division of the product varies somewhat between years of prosperity, when labour receives a smaller proportion of a larger product but a greater aggregate of wages, and enterprise a larger proportion of a larger product; and years of depression, when labour receives a larger proportion of a smaller product but a lessened aggregate of wages, and enterprise a smaller proportion of a smaller product. It has been calculated, with probably an approach to accuracy, that on the average, taking one year with another, labour receives about 65 % of the total product, and rent, interest, and profit collectively the other 35 % but no attempt, that I am aware of, has been made to ascertain how this 35 % is divided among the three productive factors. Taking rent, in the sense here intended, as inclusive of all revenue from opportunity, and profits as inclusive of the net capitalised value of opportunities appropriated and dissipated within the year, we will not prob-

ably be far out of the way if we apportion 12 % to rent, 3 % to interest, and 20 % to profit. The normal expectation of profit that would insure the continued employment of the average amount of labour engaged in industry will be less than this, let us say 15 % of the value added to the product. Now if employers could be absolutely insured, by some such device as the "sliding scale" against all labour troubles not only with their own employees, but also that their market would not be disturbed by the labour troubles of other employers, their normal expectation of profit would be considerably reduced. It is not perhaps too much to assume that one quarter of the risks of business are due to uncertainties engendered by labour disputes. If so, nearly 7¾ % would be added to wages (65 : 100 :: 5 : 7.69+) if this uncertainty were removed, without any detriment to business conditions. If the addition were to money wages, the only change, outside of the fact that the field for investment would be widened, would be that labourers would secure more and enterprisers less of the total product, but enterprisers would be as content with their share as before. But if, as it must finally eventuate, the gain came in a fall in the price of consumable commodities, as a rise, that is, in "commodity wages," it would be just as directly advantageous to the labourers, and

would also benefit them indirectly to the extent to which it widened the field for investment by increasing exports.

We are now able to discern the truth underlying the conception of a wages fund, obscured hitherto by the tacit assumption combined with it that "capital employs labour." No part or proportion of existing capital is set apart to be devoted to the payment of wages, and no wages fund exists in any such sense as this. So far as there is any relation between the demand for labour and the stock of commodities already in existence, it is exactly the opposite of what the advocates of the wages fund assume. In other words it is just when the stock of "capital goods" is the greatest that the inducement to hire labourers is the smallest. The "wages fund," if the expression may be allowed, tends to decrease as the stock of "circulating capital" increases, and to increase as "capital" decreases. The old theory of a wages fund is correct in assuming that the amount that will be expended in wages in the immediate future is a predetermined amount, but diametrically wrong as to how the amount is predetermined. In any given society, at any given time, the conditions of business are such that a certain quantity of labour can be utilised by enterprisers at the going wages, and the amount that will be

expended in wages is a sum determined by prevailing industrial conditions. A change in these conditions consisting only of an advance in money wages for part of the labourers, while it may diminish, cannot permanently increase the total—measured not in money, but in commodities—of this predetermined sum. Consequently any advance in real wages obtained by a part of the labourers is eventually at the expense of the real wages of the remainder. If such a gain to labour were capable of realisation it could come about only by decreasing the shares of the other productive factors. But, as we have seen, any such decrease, when temporarily effected, immediately sets in motion forces which restore the division of the product to its former and normal ratio. All that is permanently affected is the distribution of the wages fund among the labourers. The labouring classes to-day are probably paying fully as much more for their coal as the increase in wages paid at the mines amounts to.

The tendency of money wages to advance during a period of rising prices, though somewhat in their rear, has of course a temporary effect in retarding the rise in profits, and thus lessening, or rather deferring, the inducement to employ idle labour. After a very transient period however (if the addition to money wages

is not saved, as it will not be, because, reckoned in commodities, wages are no higher than before the rise in the market commenced), prices will again advance, and the original stimulus to employing idle labour will be renewed in full force. Any advance in money wages, during a period of rising prices, will correspondingly cause prices to advance further to a point they could not otherwise have reached. The effect therefore of strikes and labour agitations in general is to greatly increase the range within which market prices fluctuate. In other words they tend to prolong and intensify the periodicity of business activity and depression. Both periods, those of rising and those of falling prices, are of longer duration, and market prices of commodities are alternately raised to a point and depressed to a point they would not otherwise have reached. The observed fact that general prices and money wages fluctuate so very much less in countries where labour is not organised certainly tends to confirm this supposition. Possibly there is on the whole some advantage to the labouring classes in this lengthening of the industrial cycle, but if so, it must proceed from extraneous sources, as there seems to be no theoretical reason why the average of proportional wages should be increased by the longer swing of the industrial

pendulum. The real effect would seem to lie in the other direction, in that the shorter swing of the pendulum, by lessening the severity of business crises and stagnation, would remove a risk which must to some extent increase the normal rate of profit.

But if the efforts of the labouring classes to increase the aggregate of their real wages by altering the distribution of the product are necessarily futile in the long run, a similar attempt on the part of their employers to depress real wages is equally impossible of success, at least in permanent effects. When any class of labourers are ground down and forced to accept wages that afford them but a bare subsistence, the real gainers are not employers as a class (however much one class of employers may temporarily gain at the expense of other employers), but the consumers of the goods they produce; as, if prices and profits are above the normal in such occupation, competition soon reduces them. The only way employers could keep commodity or proportional wages permanently below their normal level would be to restrict the accumulation of capital so greatly as to keep the aggregate of capital permanently below the amount they could employ profitably. This would increase the percentage of the product they could retain for themselves

at the expense of wages, but would on the other hand injure them by lessening the aggregate product to be divided, because enterprise is limited not only by the available labour force but also by the amount of capital capable of profitable investment, as well as by the rate of profit that tempts to undertakings. And it cannot be doubted that in the long run and within certain limits, enterprisers and capitalists will gain more from the employment of a large capital at a reasonable profit, than from an exorbitant profit obtained on a smaller capital. And even if this were not the case, the individual enterpriser and accumulator will be governed by the obtainable rates of profit and interest. As we have seen, all capital is in actual possession of the enterprisers by whatever class it was originally saved, and enterprisers, whether they will or no, must employ it more or less productively, the only choice they have being in the special kind of production in which it shall be engaged. The quantity of the risks that enterprisers subject themselves to depends entirely upon the amount of capital in existence, and their only choice is in the quality of the risks they will become responsible for to the capitalists, who hold as it were a mortgage on capital to its full value. The interest of each enterpriser as an individual is to

obtain control of all the capital he believes he can employ at a profit just satisfactory to himself, or to better advantage. Especially is it to his advantage as an individual to save such capital as he can employ himself. When therefore profits are greatest, not only his opportunity but also his inducement to save is greatest, and may be relied upon to insure a rapid accumulation of capital, even though the interest of other enterprisers, and of the class as a whole, suffers thereby. The only way therefore to deprive the labouring classes of any part of their normal wages would be for the rich to indulge in an expenditure so profuse as to preclude the possibility of capital keeping up to the requirements imposed upon it by the increase of population and the development of the arts. A relatively profuse expenditure by the rich, which nevertheless allows of a gradual accumulation of capital slightly in excess of growing demands of population and invention, will indeed lengthen the periodicity of alternating prosperity and depression; but so long as the accumulation of capital periodically reaches an amount beyond what the field for profitable investment can absorb, labourers as a class are assured of their normal proportion of the product, taking one period with another.

We find here the theoretical justification of

the unconscious idea underlying another popular fallacy condemned by economists; namely that the profuse expenditure of the rich affords additional employment to labour. We see that it does do this at least temporarily by delaying the accumulation of capital which would have depressed the rate of profit sooner, and as it is only when profits are great and the prices of commodities high that labour is most fully employed, the effect of profuse expenditure accords with the popular but discredited supposition, so long at least as it is not so excessive as to prevent some pressure of accumulation upon its limits.

We see, therefore, that the aggregate of wages varies very nearly with the aggregate of the product, increasing and decreasing a little less than the latter in the fluctuations about the normal mean, and that the normal percentage between them also varies somewhat according as the uncertainties of business are avoided or increased. Undoubtedly there also occur variations in the normal rates of interest and rentals, which, affecting first the rate of profit, raising it above or lowering it below the normal, finally lead to some further variations in the aggregate of wages as compared with the aggregate of products. We have already noted that the special advantages

conferred by opportunity yield less and less rent as the opportunity becomes available to an increasing number of persons, while at the same time, considered as a facility for production, it becomes more and more efficacious, the result of course being that wages, interest, or profit, or some combination of them, benefit more in purchasing power than rent loses. When the special advantage is conferred by nature in strictly limited quantities, it cannot be thus dissipated among wages, interest, and profit, because the special advantage cannot become available to a new set of persons, except by the loss of the advantage by other persons, who previously possessed it. There is, however, no instance, that I know of, of an absolutely limited natural advantage. Not only are new lands constantly being brought under cultivation, and new land created by the filling in of swamps, etc., but improved methods are constantly affecting the expense of culture, so that part of the rent of the land has been, and is being, distributed among the other forms of income. The only difference between land and other forms of opportunity, commonly spoken of as "fixed capital" or "capital in use" and as "monopoly rights," is in their permanency, and this difference is, at the best, relative. They are all subject to the

same general laws, so long as they retain their characteristic of affording special advantages in production. The eventual cheapening of products, due to the dissipation of rentals, accrues of course to the consumer, and labourers, in their character of consumers, reap their full share of the benefit in an increase in their "commodity" and "real" wages. The inquiry remains as to whether they can possibly get more than their share. Some might perhaps infer from President Walker's "Residual Law of Wages" that eventually they get all. This is certainly not true in the first instance, as landlords, capitalists, and enterprisers are consumers as well as the labourers. How much of their original share of the transferred benefit these latter classes can retain is, however, another question. The fact that each cycle of expansion and depression finds a progressive nation in possession of an increased capital per capita, for which enterprisers are able to find satisfactory employment, shows that periods of activity in which profits are high and labour fully employed are longer, or at least more effective, than the alternating periods of depression in which accumulations are pressing hard upon their natural limit. As the above-noted transfer of rentals into other forms of income, as a general rule, widens the field for invest-

ment, their tendency must be to prolong good times and shorten hard times, which though to the labourer's advantage is slightly less so than to that of the other classes of producers. This however is probably more than made up to him by the circumstance that the advances in the arts, which is only another phrase for the transformation of rentals we are discussing, has actually resulted in cheapening the common things that labourers consume much more than the things mostly consumed by the rich. As under certain conditions a monopoly can be taxed without raising the price of its product, it is conceivable that, by exacting higher wages when employed in any industry yielding a large proportion in rentals to opportunity, the labourers could effect a transference from rentals to wages that would be a real addition to proportional, commodity, and real wages. This would involve, however, two or more market prices for labour in the same market, and a discrimination between employers, so difficult to maintain that any addition to real wages acquirable by this process is probably a negligible quantity with one exception —namely, an apparent tendency for the trusts to pay higher wages, than before the consolidation of interests, for the same work. This is of course at the expense of their rentals or

profits, and is perhaps made up to them in what they can afford to pay for an avoidance of labour troubles, by, that is, a decrease in the risks they subject themselves to, a gain that would go to labour anyway, however the avoidance was obtained. The trusts are also raising the average of real wages by transforming so many small enterprisers into superintendents and overseers, a highly paid class of labourers, but this of course does not affect the average real wages of other labourers.

Although we may now, I hope, regard it as proven that commodity or proportional wages cannot be increased at the expense of profits, however money wages may be advanced—because the proportion of the product enterprisers are able to exact depends wholly upon the gravity of the responsibilities they have to assume, and not at all upon the money wages they can be forced to pay—the question remains whether something can be obtained for the labouring classes, as a whole, at the expense of the purchasing power of pure interest and rentals.

First, as to pure interest, the proportion of the product that accrues to it is so small that any loss in the purchasing power of aggregate pure interest is an almost negligible quantity. Thus a rise of 10% in general prices without any

change in the money value of the aggregate of pure interest, calculating that aggregate at 3% of the previous product (a very liberal estimate), would result, if labour obtained all of it, in a rise of less than ½ of 1% in proportional, commodity, or real wages (65 : 3 :: 10 : 0.461). But even this small gain for labour would not result, for the rate of pure interest remaining the same, say 2% of the capital engaged, the money value of both "fixed" and "circulating" capital will have advanced just 10%, as the same amount of "capital goods" and "capital tools" will, by our supposition, have a money value just 10% greater than before. So that the aggregate of interest, expressed in money, is increased by 10% and the share of the product falling to capital will remain unchanged even if the rate of pure interest is not raised, as it will tend to be.

Evidently the same line of reasoning will apply to rentals so far as the opportunities afforded them are created by investments of capital. As under the circumstances supposed the money cost of reproduction is increased 10%, the limit below which such rentals cannot go will be just 10% higher. To the extent however that rentals accrue to such opportunities, or parts of opportunities, as are appropriated, the question is more complicated and

doubtful, and is less susceptible of precise determination. As a matter of observation the fact appears to be that during periods of advancing prices and money wages, the value of farm lands and of ground rentals, and the selling prices of patent rights and all other monopolies and privileges advance in a greater ratio than the general rise in the price of commodities, and during a period of declining prices the values of appropriated opportunities decline more rapidly than general prices. The availability of opportunities, as any student of Ricardo will appreciate, is more than proportionately increased during periods of industrial activity and opportunities will therefore command a larger share of the product in such times. It would appear therefore that until the culmination of the general advance is reached, the proportion of the product attainable by labour will be decreased rather than increased at the expense of the rentals of the appropriated opportunities. It is evident, therefore, that the relations of appropriated opportunities to commodity and proportional wages is similar to those of capital and enterprise in direction. All three obtain a smaller proportion of a smaller product during hard times, and a larger proportion of a larger product during good times. Labour can obtain no permanent ad-

vantage at the expense of opportunity, capital, or enterprise by either successful or unsuccessful attempts to elevate money wages above the point to which the natural competition of enterprisers will inevitably raise them. As employers cannot increase wages at any time at the expense of rentals and interest, since these are beyond their control, they can only do so by raising general prices or at the expense of profit, which injures labour by decreasing the amount of employment.

Any decrease of rentals due to the regulation of monopolies by the state accrues finally, and after a short interval, to the benefit of labour. What we have been discussing is only what labourers can effect by combinations among themselves towards the regulation of distribution. Strikes and trade-unions cannot of themselves lessen the advantages conferred by monopoly, or hasten the transformation of advantages in production into facilities of production common to all, nor can they lessen the proportion of the product the monopolists are able to exact. The state, on the contrary, possesses the means of effecting these things. The only question is how far the exercise of such powers is advisable—a matter beyond the scope of our present argument, further than to remark that progress consists

in the appropriation of neglected opportunities and the restrictions to monopoly must not proceed to the point where such appropriations would be unduly discouraged.

It is a somewhat curious circumstance that the motto the trade-unions have adopted—"An injury to one is an injury to all, and a benefit to one a benefit to all"—is perhaps the most inappropriate one they could have selected. So far as the ostensible and immediate object of the unions is to raise their own money wages, any benefits obtained—and they are sometimes very real—are at the expense of their fellow-workers. To the other classes of the community, including employers, they may indeed do harm by decreasing the total product to be divided, but it is an injury for which no compensating benefits accrue to any class. Labour agitation usually greatly injures and sometimes ruins individual employers, but never to the enhancement of real wages. It may even ruin a particular trade or harm the nation at large by restricting its exports. In all these cases there is either a transfer of demand, in which case the compensating benefits are reaped by other employers, or a destruction of demand which injures all classes alike.

How far trade-unionism is responsible for the "submerged tenth" is an open question, but

that part of the responsibility falls upon them is evident from the fact that the increased wages in any one of the unionised trades are wholly a deduction from real and commodity wages in the excluded trades, and the smaller the excluded class the more severe the pressure upon them must be. In view of this circumstance it is certainly significant that it is precisely in the nations in which labour is most fully organised that the severest extremity of poverty is found.

That the amount which will be expended in wages is a fixed sum, predetermined by the social and industrial conditions that induce enterprisers to employ labourers, is obscured not only to the labour leaders, but also to many economists, by the undoubted fact that labour agitation has coincided with a very substantial advance in real wages, and, "post hoc, propter hoc," the latter is naturally attributed to it. This rise in real wages is however fully accounted for by the "residual law of wages," and trade-unionism can only be credited with aiding it to the extent in which it has increased the productive efficiency of labour. Of course it is possible that what unionism has effected is simply the absorption of the gain due to the residual law of wages, that would otherwise have been distributed among all classes of

labour. But while this undoubtedly accounts for a great part of their success, the probability is strong that another part, perhaps equally considerable, is obtained at the expense of an actual reduction of the commodity wages of other labourers.

The normal growth of capital "per capita" affects proportional wages in two ways. The greater the capital "per capita" enterprisers are able to find employment for at a normal expectation of profit, the greater the opportunity for accumulation becomes, and the lower the normal rate of pure interest will decline, wholly to the advantage of money, commodity, and real wages. Proportional wages may however decline, as the incomes of interest and profit on the additional capital may more than compensate for any decline in their ratios. It will also lead to the appropriation and utilisation of opportunities that would have been useless in a less stable and active state of industry, thus also increasing the aggregate of rentals. The changed conditions enabling enterprise to employ additional opportunity and capital per labourer increases the aggregate of profit, the rate remaining the same. There is, of course, a marked tendency for the normal rate of profit to decline as industry expands, but not sufficiently to reduce the share of the product fall-

ing to enterprise below that enjoyed before the expansion. The growth of wealth per capita therefore leads to a probable decline in the proportion of the total product accruing to labour, but without lowering, and indeed increasing, real wages. In other words, when capital supplants labour, while labourers as a class are greatly benefited, they are not benefited to the same extent as appropriators, capitalists, and enterprisers, as classes, even when there is a coincident decline in the rates of rentals, interest, and profit.

But while the efforts of the trade-unions to raise the general average of either proportional, commodity, or real wages are necessarily futile so far as purely economic tendencies are thereby affected, it by no means follows that they cannot, and do not, set in motion social and individualistic tendencies which react to improve the labourer's condition. Even the establishment of an aristocracy of labour is not wholly indefensible. The comparative efficiency of animal organisms is mainly dependent upon the differentiation of parts and of functions, and the same thing is true of any given social or industrial group or organism. There is no better observed fact than that the more civilised a people the greater the diversity of economic conditions that will be found among them. Of

course the wealthier a people the greater room there is for disparity in individual fortunes, but the latter is a cause as well as an effect of the former. No group of individuals who are not in close touch with each other can progress far, and when society is divided into clearly marked divisions (in other words when caste lines are sharply drawn), this close touch is lacking,—there are links missing in the chain of ideas connecting those at the top with those at the bottom. The educative effect of trade-unionism can hardly be overrated. It has elevated the "man with the hoe" into a serious student of social and economic conditions. It is the leaders unionism has developed, and is bringing to the front, to whom we must look, and on whom we can safely depend, for the salvation of society from the tendencies toward socialism and anarchy which are commencing to threaten it. The men who are daily acquiring greater influence with the unions are thinkers, not so very greatly inferior to professed students and teachers in their understanding of social and economic problems. These men are sure to appreciate very shortly which among their present efforts are misdirected and inimical to the real interests of the labouring classes as a whole, and what the influences are which tend to increase

real wages and how such influence can be fostered.

They will learn that the consumer is the real heir of all the ages, and that the capitalist, the appropriator, and the enterpriser have, as it were, only contingent interests in much of the property to which the labourer, as the chief consumer, is the residuary legatee, and that the final transfer to him will be made just as fast as he makes it easier for them to perform their economic functions. At present the labourer's idea seems to be that he can force them to accept less by harassing them, which is about as reasonable as persuading a labourer to accept lower wages by making his task harder. The capitalist, the appropriator, and the assumer of responsibility have each a function to perform, just as essential to the productive process as that of the labourer. If any one of the three is harassed or hindered, not only is the combined product of the four lessened, but the hindered one gets the larger share of what is left, as is mete, for it is only at a greater personal sacrifice that his special stint is accomplished.

It surely does not tax a normal intelligence unduly to comprehend that the more the risks to which he has to subject himself are removed, the lower the rate of profit that will content the enterpriser, and that as the normal rate is

lowered, enterprise after enterprise that did not tempt him before will be undertaken, not only benefiting the consumer by lower prices, thus raising commodity wages, but at the same time further raising real wages through the fuller employment of labour. The undertaking of new enterprises involves necessarily the appropriation of additional opportunities, besides an increase of circulating capital, thus widening the field for investment and prolonging the period during which labourers are fully employed, and also further increasing wages as opportunities become less and less special. Not only this but the rate of pure interest is lowered, as the greater the number of those able to save the lower will be the rate of interest which will content the marginal saver. This difference also goes to the increase of real wages, though proportional wages may be lowered, because a low rate of interest on a large amount of capital may be a greater percentage of the total product than a higher rate of interest on a lesser amount of capital. Thus the gains of the capitalist, the enterpriser, and the appropriator all yield an addition to wages as civilisation advances.

Anything and everything that the labourers can do—and they can do much, especially when organised—to increase the efficiency of their

labour, to encourage the discovery and appropriation of opportunities, to widen the normal limitations of accumulation, and to diminish the uncertainties of business, benefits their own class. Independent of such proper regulation of monopoly as will not discourage enterprise, it is by these means, and these means only, that they can improve their economic condition. Antagonising the enterpriser, the capitalist, and the appropriator only obstructs the enterpriser in his endeavours to increase the total product, and enables each of the other productive factors to retain, in proportion to their contribution, a larger percentage of what is produced, thus cutting off the labourers' share at both ends, as they obtain only a smaller share of a smaller product.

On the other hand, while the "war against capital," as it is at present conducted, is a veritable kicking against the pricks, which under no conceivable circumstances can work anything but injury to the labouring class as a whole, there is a field of much greater promise to which the labour leaders are now turning their attention; namely, the war against privilege. Our study of the productive force "Opportunity" enables us to appreciate, as never before, how the natural tendency towards the transformation of opportunities into mere facilities of pro-

duction has been dammed and hindered in its course by all sorts of unjust laws and political corruption. It would indeed be disastrous to confiscate opportunities honestly acquired and exploited, but on the other hand it will soon become an open question whether the "sacredness of vested interests" shall for ever be suffered to stand in the way of the principle of *caveat emptor*, whether, that is, advantages in production, dishonestly and dishonourably acquired, and ruthlessly exploited, shall continue inviolate simply because the ownership has been transferred to innocent third parties.

As in political evolution power has descended to wider and wider classes, selfish considerations have become less and less prevalent and overruling. The despot looks upon the state as his private property—"L'état, c'est moi"—and does not hesitate to sacrifice the lives and property of his subjects to gratify his own whims and vanity. An oligarchy or aristocracy, though still excessively self-seeking, is influenced not only by considerations affecting themselves as a group in their relations to the people, but also by some consideration affecting the people as a whole. Their ethical standard is certainly superior to that of the despot. A community under the political control of the middle classes has yet wider sympathies and a growing appre-

ciation of the solidarity of society. And finally when the supremacy passes to the people as a whole, while the clashing of class interests yet continues, and while no political machinery has yet been devised by which the real wishes of the people are always carried out, it has again and again been shown beyond question that in great exigencies and when issues are plainly presented, the people can be trusted to decide moral, social, and economic questions with approximate correctness, and uninfluenced by class or selfish interests, which, though they still persist, in a measure neutralise each other, and are more or less denied influence by a growing altruism, which leads the voter to consider the ballot not as a right, but as a trust.

I cannot but believe therefore, especially in view of their growing comprehension of economic and social conditions, that, when the crucial test comes, the trade-unions will abandon their present efforts to change the distribution of the product between classes of producers, recognising the immutability of the laws which govern it, and that attempts of the character they are now making lower real wages, they will also not be tempted to continue them by the selfish consideration that they thereby erect themselves into an aristocracy of labour, and obtain some increase of wages at the

expense of a greater loss to unorganised labour. If however they do allow themselves to be governed by selfish considerations alone, their purpose will ultimately, but surely, be defeated by the withdrawal of public sympathy, or by all labour becoming organised. That accomplished, it will become so evident that in antagonising the other productive factors, labour obtains a smaller share of a decreased product, that antagonism to the other factors will be greatly modified and perhaps cease, except as it arises from the belief that the wages fund is unfairly distributed, or that illegitimate efforts are being made to increase the normal rates of rent, interest, and profit, especially the former. And they will recognise that such efforts can only be restricted by social and political action, and not by economic wars.

There is of course nothing new in the idea that labourers lose as consumers a part of what they gain through an increase in their money wages. But the belief seems to be quite prevalent that the balance is in their favour, whereas, if this presentation of the matter is correct, the balance is the other way and an advance in money wages is on the whole detrimental, when all the means used to obtain it, and all the results following it, are taken into account. The real wages that will be freely

offered labourers, as the result of the competition of enterprisers to obtain control of the existing labour force, essential to the establishment of desired space relations, are the utmost obtainable by labourers as a class. The effort to change distribution by agitation, strikes, and trade-union regulations decreases instead of increases the aggregate purchasing power expended in money wages, and results only in a different, and probably a worse, distribution among labourers of a smaller total. I do not think that this has been perceived, as it only becomes really evident when the subject is discussed from the standpoint of the enterpriser. The nature of profit must be understood before it can be appreciated that the only circumstance which can lower its normal rate is the removal of risk,—the lessening of the responsibilities to be assumed. Capital must also be conceived in its relations to enterprise, before we can obtain a satisfactory understanding of the influences regulating its accumulation and the rate of pure interest, and these are sure to be adverse to the interests of labourers when the accumulation of capital is hindered by the narrowing of the field for investment that results from the normal rate of profit being higher than it need be if labour agitation for higher wages should cease. In

the relation of opportunity to enterprise we do indeed discover a theoretic possibility of increasing wages at the expense of rentals and royalties, but to the slight extent this is possible, except as the result of social and political action, it involves a somewhat impracticable discrimination in the terms labourers will exact from different employers for the same service, so that in practice the gain by strikes and agitation is so slight as to be negligible, and can be better attained by state regulation of monopolies.

Besides the purely economic methods by which labourers can increase real wages, something else can be indirectly accomplished by improving ethical and social conditions, and thus increasing the productivity of the economic factors. We have seen the economic importance of increasing the total product, and that of any such increase the labourers receive their due proportion. Despite a number of silly regulations restricting the output, and the yet more serious restrictions resulting from the principle of a minimum wage, unionism has probably increased rather than decreased the efficiency of labour. An intelligent man, even when false theories lead him to be a bit of a shirk, can hardly fail to be more efficient than a stupid ignorant fellow. The trade-union is

the labourer's university, and the wider range of ideas it confers, and the standard of intellectual development it sets up, are to be sure individualistic gains, as are all other matters affecting the efficiency of labourers, but none the less on that account are they, and all other influences affecting efficiency in production, proper premises for economic deduction.

But one of the most efficacious methods by which trade-unionism can, and does, benefit labourers is perhaps to be found in the insistence upon improvements in the conditions under which labourers work and live—in the environment of labour. If, what is by no means an impossibility, the average duration of the working men's lives could be lengthened five years—let us say from forty to forty-five, during eighteen of which no labour was performed—labourers as a class would have twenty-seven years' wages to support forty-five years of life, instead of twenty-two years' wages to support forty years' living, a gain of slightly over 9% in real wages without any advance in money wages, or any decline in the price of consumable goods, to which is to be added the gain both in income and outgo resulting from the smaller percentage of idleness, due to sickness or incapacity from accidents that would not occur under improved conditions. A rigid

insistence on every possible safeguard to life, limb, and health, which employers would surely assent to without serious objection if it were insisted upon, is worth more to the la bourer than the advance in money wages for which he usually strikes, and the advantage from which, even when not temporary, is obtained wholly at the expense of his fellows.

The idea I have sought to express in the preceding paragraphs can perhaps be made plainer and more comprehensible by a more concrete presentation. When anything, such as war, social unrest, political interference with the cause of industry, growing lawlessness, or unwise and dictatorial labour agitations occurs to increase the risks of business, both the normal and the average rates of profit will be surely advanced. The aggregate production will of course be decreased, but enterprisers will get a larger share of what is produced. Both the normal and the average rates of profit depend wholly upon the subjective valuations enterprisers put upon the risks involved in the operations in which they engage. The more these risks are increased, the greater the share of the product they will demand and secure. They suffer indeed with the rest of the community from the decline of industry resulting in a

lessened product, but they do not suffer in the same proportion.

When anything occurs to increase the difficulty of saving, the rate of pure interest will be correspondingly advanced, and to this extent capitalists will secure a larger share of the lessened product. On the other hand the higher the rate of pure interest, the smaller the amount of capital employed per capita the enterprisers can find a profitable use for. To the extent that accumulations are thus restricted the capitalists will receive a smaller share of a lessened product. And the history of industry shows beyond question that capitalists as a class lose much more from this cause than they gain through an increase in the rate of pure interest, though of course it is conceivable that circumstances might exist in which the reverse was true.

As to the owners of "fixed capital," land, and other forms of opportunity, their position is evidently analogous to that of the capitalists, except that the influences at work are more variable and intensified. They gain by any rise in rentals, royalty, and hire, but lose as a body in the decreased amount of opportunities enterprisers can use at the increased charge. It is not however as easy in their case as in that of the

capitalists to determine which way the balance inclines.

The point to be observed here is that the body of enterprisers settle by competition among themselves the rate of profit, and therefore the share of the total product they will obtain. Capitalists and the owners of opportunities on the other hand, while by like competition among themselves they can settle the rate of interest, and the rate of rentals, hires, and royalties, do not thereby fix the share of the total product they obtain, because that share depends not only on these rates but also upon the amount of capital and opportunities that can be profitably employed by enterprisers; and this amount is determined, not by them but by the enterprisers, who will not employ more capital and opportunities than will leave profits, the share of the product enterprisers have set apart for themselves.

The position of the labourers differs from that of the three other productive factors in that they have no influence at all in determining the share of the product that will fall to them. Enterprisers do not pay capitalists such interest and owners of opportunities such rents, hires, and royalties as the cost of labour allows, after reserving a satisfactory chance of profit for themselves. But they do pay such wages

only as the prevailing rates of interest, rentals, and profits allow. When wages are higher than this, employment of labourers is decreased until adjusted to the aforesaid prevailing rates, and when lower, employment is correspondingly increased. When anything occurs to affect the productivity of labour, the ease or difficulty with which labourers perform their industrial function, the total product of industry is of course increased or decreased as the case may be, but the share of the product accruing to labour is unaffected, other circumstances of course remaining the same.

When, however, other circumstances do not remain the same, the share that will fall to labour depends not at all upon the labourers themselves, but upon the actions and decisions of those controlling the three other productive factors. The only way to increase the share of the product that falls to labour is to make it easier for the enterpriser, the accumulator, and the appropriator to perform their industrial functions, and harder for the latter to monopolise appropriations, provided of course this is not carried to the extent of discouraging the appropriation of neglected or undiscovered opportunities.

CHAPTER XII

THE TRUSTS

THE signs of the times indicate that we are now undergoing another development of the productive process, in which the function of the enterpriser will devolve less and less upon individuals, or upon competitive groups of individuals engaged in the same business, and more and more upon groups inclusive of all, or nearly all, those who assume the risks of producing each particular kind of product or group of products. If the past stages of the process have been hard to unravel, it is certainly hazardous to prophesy what this further step will lead to. To many it seems dangerous, to others full of promise, especially those who regard it as the culmination of economic activity, preparatory to the final evolution in which economic endeavour will be merged in social, and the combination of individuals for definite and prearranged personal purposes will be prohibited

by the state and abandoned. The subject as a whole is beyond the scope of this treatise, and I will not attempt its solution further than to point out some tendencies which should be found operative if the theories here advanced are well founded.

The first circumstance to which I would call attention is that the subject is complicated by the fact that the income of trusts is composite. They are not only enterprisers but to a much greater extent than individual entrepreneurs they are also capitalists and the owners of opportunities. The complication does not arise so much from their owning most of the capital they employ because the rate of interest on capital is so well settled and understood that those who control the trusts are fully cognisant of what part of the trust gains are interest. It is different however with that portion of the gain rightly attributable to the possession of special advantages and opportunities—that part composed of "rent" in the broad content of the term as here employed. There is no rate of rent in the sense in which there is a rate of interest or of profit. There is of course a ratio between what is paid for the use of an opportunity and its capitalised value. But not only are many advantages incapable of being capitalised or not capitalised because employed

only by those who own them, but when capitalised the capitalised value depends upon the rent they yield—and changes as the amount of rent received increases or decreases—whereas the amount of capital remains unaffected by changes in the rates of interest and profit, except of course as such changes stimulate or discourage accumulation and enterprise. There is therefore no rate of rent to guide the individual or corporation that is both enterpriser and the possessor of special advantages in apportioning his income between the two functions he exercises. Consequently he always thinks of it as homogeneous and considers as his profit all he gets after satisfying the claims of labour, of capital, and of such advantages in production as he actually pays rentals or royalties for.

That this discrimination should be made is however a very necessary preliminary to a scientific inquiry into the trust problem, for it is precisely that part of the trusts' income arising from privileges and advantages which is in question.

When we realise that every advantage in production is created partly by investment and partly by appropriation, it likewise becomes evident that the question is again narrowed to such portion as is due to appropriation, and becomes an inquiry into the principles which

should govern society in encouraging, permitting, protecting, regulating, prohibiting, or punishing appropriations of advantage. Although their application is another and a much more difficult matter, into which we cannot enter here, the broad principles which should govern state action are comparatively easy of determination. They may perhaps be stated as follows:

The creation of advantages by prohibiting or preventing others from employing existing facilities, or in other words, creating advantages for some individuals by disadvantaging other individuals, is wholly indefensible. Monopolies of this character used to be created for court favourites, and were simply robberies of the community for the benefit of the favoured monopolists. As has been shown elsewhere, this form of monopoly is not only an unjust discrimination between individuals but an injury to the community as a whole and including the monopolists, as it must always lead to a decrease in the total product and annual income of society. Any successful attempt of the trusts to raise prices above what they would have been if the combination into a trust had not been effected is of this character, and wholly indefensible on economic, social, or ethical grounds. What methods of defeating such

attempts are both wise and practicable is a matter beyond the scope of this treatise. It is in place however to remark that the power of the trusts to effect this is more limited than is generally supposed, as there are certain counteracting influences that to some extent at least re-adjust matters. The avoidance of just taxation, and the destruction of competitors by the various methods of unfair competition to which so much attention has been lately given, come under this head. So also does the obtaining of freight rebates, except to the extent in which they are granted to cover the actual saving to the railroad in handling large consignments in place of the same amount of freight in such smaller consignments as would have come to it if no trust had been formed. This saving is a real decrease in cost of production, and belongs primarily at least to those who effect it.

There are however appropriations of existing facilities obtainable by the exclusion of other competitors which result in an increase of product. Such was the original appropriation of the soil by individuals, the result of which has been the economic and social evolution from wandering tribes of herdsmen to the civilised societies of the present. This appropriation has not only been of enormous benefit to society as a whole, but those who are excluded from possessing

their quota of the soil are vastly better off than if the social organism had remained migratory or communistic. It is on this fact that the ethical, social, and economic validity of title deeds rests. The original claimants were enterprisers and the land they appropriated was their product. Subjecting themselves to the responsibilities of ownership the product belonged to them and belongs to their present representatives however its value has changed and independent of what circumstances have led to any enhancement of value. Any such enhancement of value was a profit, and as a profit is an earning as surely as and in exactly the same sense as wages and interest are, there is, and can be, no such thing as an "unearned increment," as unfortunate and misleading a phrase as ever was coined, and one responsible perhaps for more hatred, envy, and uncharitableness and more misunderstanding of economic principles than any other. It must never be forgotten however that as the title to the soil depends for its validity upon the use made of the soil no possessor has a right to withold it from the most productive use of which it is capable. Neither can the ownership of the soil confer any economic or equitable right to rack-rent tenants. Rack-renting may be defined as taking advantage of peculiar circumstances to exact a greater rental

than free competition would apportion. It is of exactly the same nature as excessive prices extorted by monopolising trusts and wholly indefensible.

Extreme individualists will of course claim that the state has no right to take fifty cents away from Peter to put a dollar in Paul's pocket. And this much may be granted them, that the attempt is unwise unless the result is fairly well assured. But it is one of the merits of the definition of the science I have proposed that it exposes the falsity of the extreme individualistic assumption. The fact that there are three possible methods of attaining ends implies the right of selecting and adopting the one best adapted for the attainment of our purposes. Manifestly the final choice cannot be left to the individual (despite just this being the claim of the anarchist) because as unanimity could never be obtained the possibility of social action would be taken away. Any one therefore adopting our definition must deny himself the privilege of adopting the extreme individualistic view. Neither can he be an extreme socialist. It is so self-evident that some ends are best obtained through combination for personal purposes that we stultify ourselves in claiming that an advantage to society can arise by prohibiting such combinations entirely. Perhaps it is not

quite wise to warn these two numerous classes off my premises, but the logical necessity is imperative.

The applicability of what has been said to the subject of trusts is this. Occasions are constantly arising when greatly to be desired ends are incapable of practical accomplishment by either the individualistic or the social method, and will not be undertaken by individual enterprisers or even by corporate enterprise unless protected by some monopolistic privilege. The state has granted in the past, and undoubtedly will continue to grant in the future, great and valuable privileges of this character in the shape of gifts, loans, remission of taxes, rights of way, and franchises. We have in these cases artificial monopolies due to the transfer of opportunities from hands in which they were of little worth to hands capable of utilising them to much greater advantage. Peter has been deprived of fifty cents and a dollar put in Paul's pocket and another dollar or two perhaps distributed among the rest of the community. Now "Public Utilities" or corporations "affected" or (as they themselves are beginning to feel) "afflicted" with a public use necessarily enjoy privileges of this character and as necessarily are trusts, as within a certain sphere at least, they are protected from competition.

It sometimes happens that Paul gets only a part of his expected dollar and sometimes he does not get anything but loses a part or the whole of the capital he ventured. In which case we are rather contemptuously sorry for Paul, or perhaps honour him for his public spirit and self-sacrifice, but we never think of reimbursing him. In other cases Paul is more fortunate and gets not only the contemplated dollar but two, three, or four dollars in addition. This is another matter. Everybody thinks he is Peter and joins in the cry of stop thief, and seems to be the more vociferous the more generously his lost fifty cents has been made up to him and a dollar put in his other pocket as a member of the community. Witness the animosity of the western farmer against the railroads despite the fact that the railroads have put perhaps five dollars in his pocket to each dollar they have distributed in dividends.

Now what right have the assembled Peters who constitute the community and wield the arbitrary power of the state to assume this attitude and how far is it wise in them to assert such rights as they really have?

Undoubtedly our legislatures have been remiss, careless, and corrupt, and a considerable proportion of the privileges and advantages in production in question were granted unnecessarily,

unwittingly, or corruptly. Unforeseen circumstances, some of which might and could have been foreseen, and some which no foresight could have discerned, have impaired or enhanced the value of the privileges given. To what extent do these things impair the validity of the grant?

The right of the state to rescind franchises originally obtained by bribery, by political manipulation, by misrepresentation, or by concealment of the real purposes for which the privilege was desired, cannot be questioned. Nor can any statute of limitation or any sanctity of the vested rights of innocent purchasers be held as a bar to the abstract right of the state to withdraw its gifts when corruptly obtained, though the wisdom of exerting the right except in very extreme or very recent cases is open to doubt.

The grant of an exclusive use of an advantage in production confers not only a privilege but imposes implied obligations not necessarily mentioned in the grant itself and the state has the undoubted right of insisting that these obligations be lived up to and to punish any disregard of them, and the decision of what these obligations are rests of course with the courts.

It is also open to doubt whether the state can bind itself in perpetuity, and how far one generation can barter or give away the rights of

its successors, but this is too complicated and erudite a question to be taken up here.

But when the assertion is made (and it is the assertion made by almost everybody at the present time) that those trusts and corporations, such as many of our railroads, in possession and enjoyment of honestly acquired franchises owe their prosperity to "an unearned increment" and are entitled only to such return on their investment as our legislators and courts regard as "fair," (what is "fair" to be ascertained by comparison with the rate of return other industries are obtaining), the theory of the productive process here advanced forces any one accepting it to a most emphatic dissent. Profit is just as truly earned, however small or however large it turns out to be, as wages or interest. When the validity of the original charter cannot be impugned the state has absolutely no moral or economic right to regulate railroad rates and charges so long as they do not discriminate between persons or places. Unless of course the right to exercise such supervision was originally retained by the state such regulation is confiscation, and only justifiable, like other cases of confiscation of property or of person, when demanded by a social necessity. Moreover the present attempt to deprive enterprisers of a part of their legitimate profits because they

have turned out to be larger than was expected is as foolish as it is wrong. As has been shown it is the unpredetermined residue which is the motive power of all human activity and the attempt to predetermine it or to predetermine its maximum limit is no more sensible than it would be to file half through the mainspring of a watch. Just as we limit enterprise will we block progress and civilisation and decrease the total product to be divided among the productive factors. If you take away the chance of occasionally obtaining an unexpectedly large profit what you accomplish is to surely raise the subjective valuation of all risks and this means of course an inevitable increase in the marginal expectation of profit that will induce enterprisers to undertake enterprises—and this means declining industry, a higher rate but smaller aggregate of interest and profit, a lowered aggregate of rentals, and both lower wages and less employment for labour.

There is indeed much that needs adjustment but the proper point of attack is not profit or interest or legitimate rentals; but, first, illegitimate rentals, that is unjustly acquired privileges and monopolies that have merely transferred opportunities without thereby increasing the facilities for production; second, all attempts to escape the tacit obligations necessarily at-

tached to all acquired facilities or advantages, such for instance as the character of the services rendered, the environment of the labourers engaged; and, third, to insure that the social and moral, that is to say, the non-economic products, shall not be deteriorated in quantity or quality.

All these matters are of course under the dominion of the police power, which is practically founded on the assertion of the dominance of social over individual interests. The right of the state to interfere when extortion is attempted comes under the same head, but it is extremely difficult to draw the line between what is extortion and what not. Perhaps the line can be best drawn by considering any price extortionate which is greater than the price that would have been natural if the new facilities in question had not been appropriated.

This of course would leave the owners of franchises and the trusts free to retain for themselves all that part of the product which arises from the legitimate use of the special facilities and advantages they enjoy, or in other words to continuously absorb if they can all the saving that has been made in cost of production. As we have seen, the natural course is that such gains, at first accruing wholly to the owners of the opportunities which enable them to be created, will gradually be distributed among

the rest of the community in their character of consumers. This tendency is usually spoken of as the "Residual Law of Wages." But the very object of the trusts and all other monopolies is to block this natural tendency and retain for themselves all of the benefit continuously, or as much of it as they can. If they should succeed in this, the rest of the community would be no worse off than before; and if it is true that every one is entitled to what he produces, the trusts are clearly entitled to all of this benefit they can retain.

Nevertheless if hereafter all the fruits of progress or even a much larger proportion of these fruits than before are to be retained by those who have created or acquired the special advantages and facilities which have made the increase possible, instead of being finally distributed among consumers, the social and economic change will be an enormous one and one that may well give us pause. That the trust is by far the most efficient instrument to effect this that has yet been tried, goes without saying. And that to a certain extent this purpose of the trusts is being accomplished cannot be denied. Of course to the extent that the ownership of the trusts is scattered no harm is done. So far as the same circumstance both increases a person's income and reduces its purchasing

power correspondingly no real change of welfare has occurred. To the extent in which labourers are also stockholders they are not harmed by the proportion in which the product is divided between wages and dividends. Since the commencement of industry the possessors of special facilities have always sought to keep the advantage to themselves and have always been more or less successful at first, but never successful in the end except as the possessors of such naturally limited facilities as those afforded by the possession of the soil. The gradual distribution of the facility and consequent dissipation of the advantage has been effected by competition of enterprisers with enterprisers, each endeavouring to possess himself of facilities as good as or better than those now yielding a rental, royalty, or hire. The very object of trusts and of all combinations for establishing monopoly is of course to block this natural process by preventing the competition from which it results. But every individual producer who makes a secret of his process, who dissembles his profits, who forestalls others in any way, attempts exactly the same thing only less effectively, and is held blameless in so doing. The question naturally arises, whether a trust that seeks to retain for its owners only the savings effected in cost of production due either to

operating on a larger scale, savings in the cost of marketing, or to improved processes is socially and economically guilty merely because it succeeds in accomplishing permanently what every producer tries to do but only succeeds in accomplishing temporarily.

The decision of questions such as this cannot be left to Economics. The answer must be found in social and individualistic considerations. So far as advantages are created by investment they can evidently be safely trusted to the levelling action of competition. So far as they are appropriations, however, though this seems to have been safe and equitable enough in the past, it is now becoming less safe, equitable, and wise. The interest of society as a whole must manifestly determine the proper policy to be pursued. As the appropriation of undiscovered and neglected opportunities and advantages is exactly what constitutes progress and the advance in material civilisation, what society can least afford is any policy which discourages such appropriations, and so far in the history of the world the only effective inducement for making them has been found in allowing the discoverer of a better way of doing anything to reap the advantage of it for himself as long as he could. Society has even gone further than this in patent laws. What these laws really do is simply to

aid the appropriator of a facility in production in retaining it for himself longer than he would otherwise be able to.

Now if the only way of creating or appropriating a facility of production were to allow its first appropriators to monopolise its benefits for ever it would be socially wise to let them do so. The appropriators are themselves units in the community and whatever benefits them without injuring the other units manifestly increases the total and average weal of society. On the other hand a new facility that is free to all from the beginning (provided of course its use is as quickly and generally adopted) is more productive of utility than it can be when monopolised, because a monopolised article from the higher price necessarily exacted for it cannot come into as general use. In addition therefore to any gain attributable to a more even distribution of its total product society gains in the amount and utility of the total product by restricting monopoly gains. In other words allowing monopoly gains is the price society must pay for progress, and the restriction of monopolies by the state becomes simply a question of proportion. Any restriction tends to discourage the discovery and appropriation of better ways of doing things, so long at least as the monopolisers are not attempting to obtain more than the real

reduction they have effected in cost of production; but manifestly if they are allowed to retain the whole of the reduction for ever the rest of society will not be benefited. The moral question involved is entirely beyond the scope of this treatise, but I may be allowed to observe that the way of doing a thing existed before its discovery and its discovery and appropriation cannot therefore give an absolutely exclusive moral title to it. All the original appropriator will in any event have a moral right to demand is that others to obtain a right to its use shall discover it for themselves and shall refrain from imitating him until they have. We find an instance of this claim in charges of plagiarism.

The ethics of the matter however lies deeper than this,—there is always the implied obligation that an appropriated facility should be utilised as productively as possible. Our title to this continent is founded on this principle, in accordance with which we were fully justified in dispossessing the Indians. Society has therefore the undoubted moral and economic right of restricting monopoly when it reaches the point where more harm is done by restricting production than benefit gained by encouragement to the discovery and utilisation of overlooked opportunities.

It is also a matter of great doubt that the hope of perpetuated advantages such as the trusts seek to establish would be as strong and effective a stimulus to the discovery and appropriation of neglected opportunities as the temporary and the naturally diminishing advantages of the past have proved themselves. It is human nature to "let well enough alone" and it has been the keen pressure of competition rather than dreams of excessive wealth that has led to the appropriations of the past. It is too soon perhaps to speak positively as to this tendency, but the least indubitable indication that the trusts are discouraging invention and discovery would afford good ethical, social, and economic ground for restricting them.

The Theory of the Productive Process I have ventured to advance yields us, I think, a more comprehensive and well-proportioned view of the Trust Question, or rather perhaps of the problem of Monopoly. It has not enabled us perhaps to say anything which has not been said before, but it places the different things which have been said by others in somewhat different relations and with some change of emphasis. Especially does it emphasise that monopoly is only a positive evil when it oversteps its legitimate bounds and attempts to take away from others facilities of production

already in their possession. When the advantage to be monopolised is as yet unappropriated it is distinctly to the advantage of society that it should be appropriated and utilised in production, and the only means that has hitherto accomplished this is monopoly, and in this fact the appropriation of neglected opportunities finds a full economic, social, and ethical justification. This does not however give a title in perpetuity to the monopolisation. The legitimacy of any title to opportunity depends entirely on its yielding a net benefit to society as a whole, including of course the monopolisers in society, and taking all ethical, social, and economic results into the calculation. This reduces the Trust Question (and the socialistic question also) simply to a matter of proportion, which will be different for every separate industry in which mankind engages. Any attempt to apply "Procrustean" laws to all industries alike, or to classes of industries, is not only doomed to failure but will work inevitable injury to industry and society.

Our Theory of the Productive Process also indicates, I think, along what lines the regulation of trusts and monopolies should be undertaken. Such monopolies as patent rights, secret processes, good-wills, etc., which are in process of natural disintegration and dissipa-

tion, and such natural monopolies as land, had better be left alone, subject only to such police regulations as all industries should be subjected to and to their productive employment (*i.e.*, the owner of a patent should not be allowed to suppress its use).

When we come however to monopolies founded on public franchises or on the saving of cost in producing in large quantities, the question of regulation divides itself into two parts,—the suppression of extortion and the gradual transference of the benefits yielded by a new facility of production from the original appropriator to the final consumer. Extortion results of course from monoplisers exacting from the consumer more than he would have had to pay if the new facility had not been appropriated and is wholly indefensible, and it is not only the right but the duty of the state to prevent it, though of course how the state can prevent it is not always easily determined.

When we come however to what may be called legitimate monopoly we comprehend, as the present view of the productive process hardly teaches us, that monopoly is not only a true productive factor but a very important one, one without which we would all still be savages little if any above a herd of wild animals. To restrict

the individual enterpriser or groups of enterprisers from all appropriation of neglected opportunities, even if we entrust the state, as the socialists would have us do, with this part of the function of enterprise, at the very best would retard human progress and probably lead society into a static or retrogressive condition. The problem then is to get the enterprisers to make all the legitimate appropriations they possibly can, and to pay them as little for doing so as they can be persuaded to accept without greatly limiting their search for neglected opportunities or their willingness to employ them productively when found.

As a practical problem this of course has its difficulties, as all questions of proportion have, and we should therefore proceed cautiously and tentatively and should avoid experimenting with too many kinds of industry at the same time. A good deal will be accomplished when this is recognised, and we abandon attempts to accomplish reforms by sweeping regulations or by the rigid application to all cases of any one or two great principles.

An economic problem is necessarily an attempt to determine the resultant of several more or less diverse forces rarely working in the same direction. The question therefore forces itself upon us whether the success of the trusts

in restricting competition, and thereby retaining for themselves a longer enjoyment of appropriated opportunities than would naturally occur, sets in motion any self-acting and conflicting tendencies which limit the ability of trusts to accomplish their object. We have already seen that labourers are wholly unable by anything they can do as labourers to take away the share of the product claimed by enterprisers, capitalists, and owners of opportunities. It is of course possible for them in their political capacity to hamper the other classes by more or less wise or unwise legislation. How the distribution of the product could be changed by legislation is outside the present scope of our inquiry, which is confined to the consideration of natural tendencies; which should be understood before any artificial interference with natural tendencies should be attempted.

According to the present conception of the productive process, capital can never, even temporarily, be excessive. But if this is true it is difficult to discover anything which can prevent the trusts forever from retaining all the benefits arising from a declining cost of production due either to the economies of production on a large scale or to new discoveries and inventions. The conception of the productive process here contended for on the contrary informs us that

there is a condition attached to the exploitation of monopoly which must greatly limit the possibility of extortion. This condition is that the success of the trusts, both by increasing the inducement to save, and the power to save, will quickly increase the pressure of capital upon its limitations. The more rapid the accumulation of unsold goods the sooner comes the time when they cannot be sold at cost of reproduction. When this stage is reached not only must the trusts stop raising their prices but they must dispose of them at the price the community can afford to pay, which price will necessarily be below cost of reproduction until the stock of unsold commodities is reduced to normal proportions. During this period the trusts cannot exact any extra profit for themselves. To the extent in which high profits and great rentals stimulate accumulation the attainment of high profits and great rentals is made difficult and in fact impossible beyond certain limits. There is only one way in which this counteracting influence can be escaped, namely by the owners of the trust themselves supplying the demand for consumption they have deprived the labourers of. The owners of successful trusts and franchises will of course increase their expenditure for consumption somewhat, but unless they are so profuse in their living expenses as to check

the accumulation of capital, they will be forced eventually but surely to reduce their prices below the cost of reproduction, inclusive of a normal profit.

Now as rentals or royalties are an element in the cost of reproduction and form also so large a proportion of the income of trusts, it might be supposed that a mere loss of pure profit would not greatly harm the trusts. This view of the matter ignores the fact however that profit can have a negative as well as a positive value, and may be a loss as well as a gain. An enterpriser who owns the facilities he employs will continue his production at a loss (counting the rentals that he theoretically pays to himself as an element of his cost of production) so long as the loss is less than the rentals. In other words, a manufacturer owning his factory or renting on a long lease will continue to produce so long as the price of his product yields him something more than he has to pay out in wages and interest, but will certainly not add a wing to his factory. If therefore all industries were organised into trusts and capital continued to accumulate faster than the field for profitable investment widened, general prices would inevitably be forced down to a point that not only left no profit to enterprise but absorbed a large portion of rentals. When the reaction

came and consumption caught up with production, the field for investment in fixed forms would not be widened until the price of the product had increased to a point that restored these impaired rentals and the normal rate of profit. Manifestly therefore the universal adoption of the trust system would not greatly change the distribution of the product among the four functions, however greatly it disturbed the distribution of income among individuals. And so far as there was any change in the distribution according to function, it would not affect the share of the labourers so long as all trust incomes contained the same proportions of rentals and profits. As this however would not be the case, those industries in which the proportion of rentals to profits was small would first feel the pressure of capital upon its limitations, and would discontinue or lessen production before the larger rentals of other industries had been much impaired. The burden of adjusting capital to its field of usefulness would fall then on the industries yielding the least for rentals, and it would be in industries of this class that the employment given to labourers would vary the most.

But though what has been said is true as a general proposition, its force is greatly modified by the fact that each commodity stands on its

own bottom as to supply and demand. The fact that those enterprisers who are also the owners of the advantages and facilities they utilise can afford to continue production longer on that account, will cause them during hard times to accumulate greater unsold stocks and thus force them eventually to reduce the price of their product to a lower level than they would have been forced to if they had hired or rented their special facilities, and were thus forced to suspend or lessen their operations before the rentals afforded by their industry were impaired. The effect of this tendency can however be either partly or fully counteracted by the intelligent foresight of trust owners, leading them to slacken their operations before their rentals are much if any impaired, and several of our trusts seem to have adopted this policy.

It is also to be noted that none of the consequences here depicted will ensue provided the lessened consumption of other classes is made up by the increased consumption of trust owners. In that case the accumulation of capital will be no more rapid than before and the proportion of the product taking the form of rentals can be indefinitely sustained, and the share of labour permanently reduced. That monopoly leads to some increase of consumption on the part of the

rich is indisputable but it is equally indisputable that it does not lead to a corresponding increase. Just how this circumstance affects the distribution of the product among the functions is an intricate question into which I cannot enter. My business here is to call attention to the fact that the subject of trusts cannot be very intelligently considered by any one who fails in his understanding of the laws governing accumulation, and that the present conception of the productive process denies the very existence of the most important of these laws.

Another point of superiority in our conception of the productive process is to be found in the more accurate and fuller concept it gives us of the function of monopoly. It is hardly necessary to call the reader's attention to the differences between our concept and the old one, if indeed the old one is worthy of being considered a concept at all. The former possesses a distinctness and accuracy which the old idea lacks, as is indisputably shown by nobody, at least so far as I am aware, having considered land and fixed capital as only different varieties of the same productive factor. This failure is due of course to the fact that no one seems to have noticed that the distinctive peculiarity of the function that made the factor must be that it afforded an advantage or op-

portunity of which competitors could not, immediately at least, avail themselves, consequently while the monopoliser of "land" was recognised as an economic factor, other monopolisers were not so regarded. Surely so inadequate a conception is hardly worthy of the name.

CHAPTER XIII

SOCIALISM

AFTER the trusts, what? is a problem of the future too difficult for any serious attempt to lift the veil, until at least it has been determined by actual experience just how a complete, or comparatively complete, organisation of industry affects society. The socialists profess to welcome the trusts as a transient phase of industrial evolution, leading naturally up to the adoption of the system they advocate. The view of the productive process here advanced shows how mistaken they are in this supposition. The change from the trusts to complete socialism, if it ever occurs, instead of being a natural evolution will be a revolution. The two systems are diametrically opposed in principle. The whole history of production exhibits the growing differentiation of the enterpriser culminating in the trust. The controlling motive of industry has been less and less the totality of the product, and more and more the aggregate of that part of the product which

accrues to enterprise. The division of the product has been constantly governed by a growing definiteness in the pre-arrangement that has made the process personal and economic. The trust, to be sure, tends to combine the functions of the appropriator and the capitalist with those of the enterpriser, that is fewer opportunities and less capital are actually rented or loaned by each individual to others, but the different sources of the trust's income are as purely personal and as sharply differentiated as ever. The profit to be obtained by assuming the responsibility of ownership, and by the appropriation of disregarded opportunities, is more than ever the distinct incentive to production. The eagerness for profit has grown and not diminished, and it is to be feared that callousness for the interests of the other productive factors has also increased.

Socialism proposes to reverse all this and substitute the totality of the product for the expectation of profit as the exciting cause of productive effort. It proposes to abolish the personal incentive, which reaches its culmination in the trust, and substitute for it the impersonal altruism of the social motives. So radical a change in the very mainspring of industry would be a revolution and not an evolution. It is indeed true that the complete

organisation of any industry makes it easier to confiscate it, just as it is easier for the robber to steal bread than to steal flour and bake it into bread. The fact that a man who has been robbed had packed his goods in a trunk is hardly a proof that his being robbed is a natural and proper evolution from his goods being packed.

The principles here advocated also make it plain that confiscation is a necessary preliminary not only to every socialistic organisation of industry, but also to the assumption by the state of any existing industry producing salable commodities. This cannot be accomplished without narrowing the field for the investment of private capital, unless the state carries on the industry wholly with capital borrowed from private citizens. And even then there is a restriction of the field of private enterprise. When the debt of the state is finally paid, the aggregate of private capital is necessarily less by the amount of capital that has become public or social. To just the extent that the state assumes the ownership and conduct of industries, it restricts the field of economic investment and deprives its citizens of the opportunity of entering into enterprises, accumulating the private capital, and seizing the neglected advantages that are capable of being utilised in such industries. The owners of private property would be help-

less before the encroachments of the state that engaged in the policy of gradually socialising industry. And when all industry was socialised there could be no economic capital—that is, no private property except unexchangeable consumers' goods—left in the possession of individuals. Whether the result was accomplished by taxation, or by the saving of the profits of the state-assumed industries, would make no difference. No private possessors of economic capital or opportunities would be left. Possibly the good of the whole might be held to justify this wholesale destruction of vested interests and private opportunity, but it is idle for the socialists to claim that their system is not opposed to economic private property or that it can be instituted by any other process than that of confiscation, either open or disguised, that is, either sudden or gradual.

The probable effect of a socialistic régime on individual character and on social evolution, and the retroactive effect upon the power to produce and the incentive to its exercise, though of supreme importance to socialism as a question, are of course outside the purpose of this treatise. All that lies within our province is to show that it is the negation of economic endeavour and not the natural development from it.

The advantages of combined over individual activity have been too much dilated upon to require more than mention here, but the advantages and disadvantages of economic as compared with social combination, although fairly well recognised, require some attention. Both possess, or rather theoretically could possess, the advantages arising from combination of effort. What advantage in this one has over the other belongs theoretically to social activity, as the state can effect wider combination than any individual enterpriser, even when a trust is the entrepreneur. On the other hand the state cannot make as efficient a combination as the individual enterpriser, because it cannot make as intelligent a selection of the subsidiary factors. It must at the best be governed by general rules, even if we suppose all politics to be eliminated; and, as is exemplified in Civil Service examinations, no general rules can be formulated that will result in any approach to the wise selection of subordinates which the individual enterpriser is capable of. Neither can the public intelligence, wiser as it often is than that of any individual as to great questions of national expediency and morals, be expected, on the whole, to make as fortunate selections of methods as the managers of industrial enterprises. Just in proportion as it descends to

details must state action decline in intelligence. Even therefore in an improved state of society in which altruism should be so developed as to become a stronger motive than personal gain, the utmost possible efficiency in the production of what could have been exchangeable things would be less than that resulting from individual initiative, so far as the intelligent direction of industry is in question. On the other hand, there might be compensating gains through social initiative, in such a society, arising, as we have seen, from the wider organisation possible, and also from the greater consideration that would be given to social and ethical requirements, and also, as in individualistic acts, from the ruling object being the totality of the product rather than the share of it which accrued as profit. In an ideal community these considerations might possibly outweigh the loss due to less intelligent production as above referred to. Economic activity may be therefore merely a phase in the evolution of the productive process, becoming more and more restricted in scope as society progresses and altruism triumphs over individualism, though it is hard to imagine such a state of human perfection that the hope of definite personal gain will be entirely eliminated as a motive to combination of effort. Nevertheless society does progress altruistically, and

as it progresses one department of industry after another will probably be entrusted to social direction, first those in which the interest of the enterpriser is most antagonistic to that of the three subordinate producers, and those in which the character and amount of the product have the greatest retroactive social and ethical influences.

It is not cynical to assume that the supplanting of economic by social activity must be exceedingly slow if a decrease in the joint production of ethical, economic, and social results is to be avoided. Socialism will differ from the present state of society indeed in the very important particular that the director of all enterprise and the recipient of profit will be the people as a whole, instead of a single person or group of persons mainly actuated by self-interest. That this is a return to an archaic and abandoned form of civilisation is not necessarily its condemnation, for it may be only another instance of what has been called the "spirality of progress," but in the present state of human evolution, the healthy mind naturally revolts against the abnegation of self involved in complete socialism, which amounts to a voluntary slavery of the individual to the state as a master, however beneficent and wise the social tyranny should be. So long how-

ever as the individual can retain command over the greater part of his activities, whether individualistic or combined, the development of individual character will not be greatly, or perhaps badly, affected by the state's assuming the entrepreneurship of such forms of production as can be least safely trusted to individual enterprisers, more or less regardless of ethical and social requirements, as well as of the interest of the subsidiary factors.

Marx and his followers appear to misconceive the end they are struggling for, in employing the term "capitalistic production" as an antithesis to socialism. It is not the capitalist, as such, but the entrepreneur to whom their proposed system is unalterably opposed. Any industrial system in which the product accrues to the state is purely socialistic, and a system could be permanently established in which the state paid rent, interest, and wages for the use of opportunities, capital, and labour, while reserving for itself the direction and choice of enterprise and the ownership of the product. Indeed this is the only socialistic system which would not involve the confiscation of vested interests. It is probable indeed that the possessors of vested interests, when transformed into bond-holders, would not long remain undisturbed in their possession. Their income

would soon, though very unjustly, be looked upon as a tax extorted from the unpropertied classes, and little by little their rights would be infringed upon, so that a gradual confiscation would eventually lodge all the productive factors in the state. For, what socialists are apt to ignore, the remaining productive factor, labour, would be absorbed with the others. The state of course could then endeavour to pay wages in accordance with the productive efficiency of the labourer, but when there is only one employer it is he alone who determines how the efficiency of each labourer shall be valued. When the choice is between the award of the state and starvation, the individual labourer will have absolutely no voice in determining either the nature of his occupation or its emolument. He will have become a slave, and necessarily a victim of injustice, as it would require omniscient powers, which the state certainly can never possess, to apportion the national income in wages with any near approach to equity. At present each of us, on entering or pursuing the business of life, is a constant critic of his own capabilities, and, so far at least as circumstances allow, is constantly seeking to discover and pursue the avocations for which he is best adapted. The round pegs do not always get into the round holes, but

they usually secure an oblong one into which they fit passably well. But the state will have absolutely no means of determining the abilities of the individual beyond observing how he has comported himself in the past. The man, once condemned to what he was unfit for, would have no adequate means left of indicating to the ruling powers what he was fitted for. Once in a square hole, he would be rated as incapable of anything better and left there, however honest and intelligent the ruling power might be.

The better understanding of the enterpriser's function—the perception that it is not only the mainspring but also the sole incentive to production—certainly makes somewhat plainer the danger of robbing this only real productive agency of personality. Every living thing from the commencement of life has been an eager seeker after its own personal ends. Something indeed may occasionally be gained by subordinating personal ends to social and ethical requirements, but that is a very different thing from the entire abnegation of such personal ends as are to be obtained by combined action, which is what the socialistic scheme requires of us, when carried out to its legitimate and logical conclusions. There are, as has been pointed out, undertakings which cannot be trusted safely to the individual enterpriser. But it is

one thing to socialise them and another to throttle entirely all individual initiative.

Lastly, the views here taken of the scope of Economics, and of the function of the enterpriser, throw some light on the vexed question of how far the state is justified in interfering with individual and economic actions and rights. We see that this is a question for neither Individualism, Economics, nor Sociology to decide alone, but one that can be properly resolved only by giving due weight and consideration to the individualistic and social, as well as the economic, results that will follow. Every economic result has a retroactive influence upon individual character and on social evolution, and these in their turn have their retroactive influence upon industrial efficiency and progress. Whenever it can be clearly ascertained that these retroactive influences work more harm than the direct good obtained by an action, whether that action be individualistic or economic, the state would seem to be justified in regulating or prohibiting it. Of course, as to a great part of human activities, the proper balancing of all the pros and cons is impossible to our limited intelligence, but when it can, with a considerable degree of certainty, be perceived which way the balance tends, the individual has no right, by either doing or refraining from

doing, to bring about a positive balance of harm. Combined effort with a personal purpose is only one of three ways of obtaining our ends, and it is not always the best way. As to with whom the decision lies as to which of the three methods shall be adopted to secure a given end, it is manifestly the individual when the decision lies between the individualistic and the economic, and as manifestly the state when it lies between the social and the economic. As between individualistic and social methods the responsibility is divided. To the extent that any action of the individual has no retroactive effect upon others, the individual must be the arbiter, but when the safety or happiness of others is imperilled, both the right and the duty devolve upon the state of regulating, restricting, or enforcing individual action, taking into consideration of course the interest of the regulated individual as well as those of the rest of the community, and the hindrance to the development of character always attendant upon the restriction of the individual.

But while our theory of the productive process (recognising as it does that there are three possible methods by which human beings can obtain their ends, each of which has a legitimate field of its own) finds a place for the partial socialisation of industries, it at the same time

shows us that its proper sphere is a very limited one, so long at least as human nature remains about what it now is and always has been. It also makes it plain that the development of character that would make any considerable extension of social initiative advisable is not wholly ethical. The social direction of industry, however altruistic those persons should be to whom it was intrusted, would necessarily be less intelligent than when a personal purpose guides. The fact that personal initiative is primarily self-seeking does not alter the fact that it is more intelligent in the adaptation of means to ends. It is a matter of common observation that the more honest, scrupulous, careful, and exact in their habits public officials are the more inefficiently the public business is conducted. This is exactly what is meant when "red-tape" is complained of. An able but honest man will not and should not assume certain responsibilities for others, that he would unhesitatingly assume for himself. It is not an unusual historical fact that unscrupulous statesmen, even when their primary object was to consolidate their own power, or to line their own pockets, have accomplished vastly more for the good of the nation than if they had been altruists. Witness the careers of Napoleon and Warren Hastings. It is even contended, with great

plausibility, that the régime of Tweed was worth to New York City many times its cost. The relative incapacity of wisely assuming responsibilities (which our theory points out as far the most important of the productive functions) must always stand in the way of the socialisation of industry. It is inherent in the quality of social initiative.

Again our theory makes very plain the complete falsity of the charge of exploitation which the advocates of socialism never tire of ringing the changes on. To obtain an advantage by fraud is of course to exploit, but neither party to a free exchange can be exploited by the other, because each participant is benefited or the exchange would not take place. The slave is exploited because he is forced to exert himself for the benefit of another. But the hired labourer exerts himself for his own benefit. He does not sell his effort to his employer, but the result of his effort. He transfers a shovelful of earth from one place to another. He has no personal interest at all as to just where the shovelful shall fall, but his employer has an interest and a very vital interest. The purpose served by the change in place the shovelful has undergone is the purpose of the employer, with which the labourer as a labourer has nothing to do. Provided the labourer is

recompensed for his sacrifice, receives, that is, as much as he could have secured if he had done something else instead, how is he exploited? The claim of the socialists is that he is entitled to all the benefit his employer has derived from the change of place effected. Suppose the shovelful has been applied to stop a leak in a dam and that a million of property has been saved by it, is the labourer exploited because the million saved is not handed over to him? An extreme case such as this shows the absurdity of the claim that "labour produces all things" and is exploited when it receives less than all that is produced. To suppose that the result of hired labour belongs to the labourer is an especially naïve contradiction of terms, for the word "hired" connotes that the labourer sold this result to his employer before he delivered it to him. The claim therefore involves the absurdity that a seller continues to own what he has sold even after he has parted with it and been paid for it.

No one intelligently accepting our conception of the productive process could possibly stultify himself by either of the two suppositions which underlie all the assertions and reasonings of the advocates of socialism. The conception once mastered that labour is a subsidiary factor and only one of the three means by which a desired

product is obtainable by the person who is willing to subject himself to the responsibility of its creation and possession, and it becomes self-evident that the performer of only one of the four functions essential to production cannot lay claim to the whole product to the exclusion of those who perform the three other functions. Any one wishing all of any product must either perform all four functions himself or perform the dominant function of enterprise himself and hire others to perform the three subsidiary functions. To the extent of course that any of the subsidiary factors are defrauded of their proper competitive share of the purchasing power of the product, wrong is done, as is also the case when any part of the fairly earned and legitimate portion of the dominant factor is confiscated.

When again it is perceived that the difference between an economic and a social action is only in the method adopted to attain our ends or desires, it becomes also very evident that while one method is unquestionably better adapted to the attainment of some ends the other method is as unquestionably better fitted for other purposes. This reduces the question between the advocates of the two methods to one of degree simply, and points to a solution differing somewhat for each sort of end, for each

kind of industry. The contention of the extreme socialists that social combination is destined to entirely supplant economic combination becomes unthinkable. And on the other hand any specific proposal to transfer the enterpriser's function from the individual to society in obtaining any special end should at least be granted an impartial hearing and unbiassed judgment, and should not be prejudged as dishonest simply because it is socialistic.

It seems to me at least that regarded as it must be regarded in the light of our theories the bogy of socialism loses all its terror. The subject becomes capable of calm discussion and cautious judgment, when all that can be debated is to what extent one method can supplant another method, the advantages and disadvantages of each method being recognised by both disputants and the only question between them being as to how the balance inclines in the special case under consideration. The mutual denunciations—the charges of robbery by the one side and of confiscation on the other —become ridiculous when the two methods of combined action are seen to be equally just and legitimate, and the only ground for preferring one to the other in any special case is its greater efficiency for that special case.

CHAPTER XIV

CONCLUSION

IN concluding this treatise I have only to add, that my design has been simply to establish and defend a novel view of some of the more fundamental terms and ideas of the Science of Economics. Any change in our fundamental ideas necessitates of course more or less modification of subsidiary propositions, and some rearrangement of theory. To trace out all these modifications and rearrangements would be a work of supererogation until my theory of the productive process has met with some degree of favour and acceptance. As a sample of its applicability to practical questions, I have ventured to present, in the last few chapters, a few conclusions that the theory seems to disclose, concerning the Labour Question, Trusts, and Socialism. And elsewhere I have incidentally hinted at its applicability to other practical matters. It seems, to me at least, that the conceptions of these questions,

thus arrived at, agree more closely with the facts of the industrial situation, as we are accustomed to observe them, and with the ideas embedded in the language, and more or less unconsciously held by everybody, than the explanations of these phenomena hitherto offered by Economics. This of course is, at present at least, a matter of opinion, and is advanced in the hope that others, when their attention is called to it, may finally come to agree with me.

Very likely a similar examination of a greater number of other subsidiary theories and practical questions by the light of our theory, would further strengthen its verification, but the task would evidently be an immense one, not only beyond the bounds of my time and strength, but also out of place in a preliminary statement and establishment of a novel point of view, which is all this treatise is intended to attempt. Personally the author regrets that the application of the involved principles is as wide and far-reaching as it appears to be; for it will naturally arouse opposition in some proportion at least to its disturbance of preconceptions. He also recognises that, if it had been possible, a presentation of his three problems, one at a time, would have stood a better chance of acceptance, not only because it would have been more simple and consecutive, but also because

the reader would have been called upon to give up his preconceptions more gradually. The connections between the problems were too many and too intimate, however, to allow of this. The three are really parts of one great problem—that of the productive process—and had to be treated as a whole despite the difficulty of doing so—a difficulty the reader must now appreciate and will allow for. While this is true, however, it does not follow that the author's conclusions are entirely erroneous unless all his premises are accepted. Even if it be denied that positive results are obtainable by deductive classification, and that the scope of Economics is confined to the consideration of a distinct class of human activities, and that profit is the reward of subjection to responsibilities, the great fact remains that there is a radical difference, which has been overlooked and ignored, between those who furnish the means of production for a remuneration predetermined in amount, and the one who employs the means, furnished him by others, in the hope of thereby obtaining an unpredetermined residue for himself. A radical distinction remains, however the function of the enterpriser is defined, even when the definition is so illogical as to connote that he also is nothing but the furnisher of a means, the distinction being of course that

one of the means is furnished by himself in his character of entrepreneur, while he cannot furnish the three other means in his own character.

Again, in view of the considerations herein advanced, I cannot comprehend how any logical mind, even when my premises are not accepted, can continue to treat the productive factors as fundamental terms, when it is so self-evident that it is the exercise of a peculiar productive function which determines and controls the character of the productive factor exercising or performing it.

Most of the practical conclusions at which I have arrived and which differ from conclusions now looked upon as established follow, I think, logically from these two premises alone —namely that there is a radical distinction between the employer and the furnishers of the means of production, and that the factors must be defined in terms of the functions and not the functions in terms of the factors. It will be impossible therefore for any one to get away from our practical conclusions simply by refusing to submit himself to the restrictions of method I have advocated, and rejecting my definition of the science and my Theory of Profit.

Nevertheless, while this is true, it does not follow that the various theories I have advanced

do not each form a necessary part of a consistent whole, and taken together constitute a consistent theory of economic production. On the other hand, the conclusions, above referred to, which could have been based alone on the two irrefutable premises I have called attention to, cannot be brought into close accord and logical connection with any theory of the productive process based upon the idea that Economics is primarily concerned with the productive aspect of all human actions—because in two great classes of human actions which surely have a productive aspect, namely the individualistic and social, there is no proper differentiation of function and especially no differentiation of the employer's function. The conclusions drawn from the two premises are not true of all human activity but only of such human activities as are called into being by combination under the stimulus of a personal purpose. They are true, that is, only of industrial or economic productive activity, as one chooses to call it. They are not true, or at least wholly true, of individualistic or social productive activities, or of any aspect of them, despite the fact that all the productive functions are exercised in individualistic and social as well as industrial activity. In other words, industrial productivity differs so radically from

other forms of productive activity that we cannot determine its laws except by isolating it, which is just what those refuse to do who object to our considering Economics as confined in its scope to the consideration of a distinct class of human actions.

Again the dim, uncertain, and undefinable conception of the scope of Economics, as concerned with a certain aspect of all human actions, cannot lead to subsidiary conceptions more precise, or at least much more precise, than itself. The shortcomings of a major premise are inseparably attached to all conclusions based upon it. So long as we have failed to obtain a precise conception of the nature and scope of any science, we cannot be sure of any classification of its phenomena based upon the indefinite conception we possess. So soon however as we arrive at a definite conception of our general class, we are prepared at once to test our subdivisions of it, and the inadequacy of our previous conceptions becomes self-evident. We have no right to expect any great degree of accuracy in the conceptions and definitions of any economist who has not arrived at a clear conception of the exact scope and character of the science. He is not in possession of much which could afford him valuable suggestions and decisive tests. On the other

hand, any one who has a distinct conception of his general class, even when his conception is an erroneous one, is in possession of something which inevitably suggests and tests subsidiary distinctions. And as the deductive process is infallible as a process, his subsidiary distinctions, when correctly thought out, are sure to be true although the truth arrived at may be only a subjective and not an objective agreement. When, however, put to the test, the agreement proves to be objective, it confirms the reality and applicability of the general class upon which conclusions have been based. The point which concerns our special argument is this: that many of the conclusions which we have reached, although they might have been chanced upon by one without any very precise concept of the scope of the science, were not pointed out and indicated by such indefinite conceptions, whereas a clear and precise concept of our general class has indicated the subdivisions and distinctions, which forced the conclusions in question upon us. The precise conception and definition of the scope of the science has afforded us a solid foundation for our deductions, and is therefore their fountain-head, and the Theory of the Productive Process we have advanced is a consistent whole, which could not be truly affirmed of the con-

ception of the productive process arrived at by any one acquiescing in our practical conclusions, without recognising their foundation and source.

It would be beyond the scope of a treatise such as this to work out all the conclusions deducible from our premises. So doing would involve covering the whole field of the science. I have ventured to indicate, I fear very inadequately, only a few of them, but sufficient I trust for the general line of my argument. The verification of these conclusions is of course a matter of observation—a matter of induction—and I cannot, I fear, expect that all observers will agree with me, but surely no one will be found so hardy as to deny, for instance, that periods do really occur in which unsold goods accumulate, and that such accumulations of "capital goods" always precede and accompany a stagnation of industry, during which period fewer labourers and less machinery are employed, fewer goods produced, and smaller savings made. Neither can it be gainsaid, as an observed fact, that as a rule times tend to become prosperous so long as exports are relatively larger than usual, as compared with imports. Neither will the most pronounced free trader claim that the policy of protecting the manufacturers of a naturally agricultural country has

wrought quite as much harm as it should have, according to the arguments founded on the dogma of *laissez-faire* and the assumption that profitable and productive are synonymous terms. These examples and thousands of others that could be cited are surely, so far as they go, to be accepted as verifying the conclusions we have reached. They are not only in accord with, and explained by them, but are also *a posteriori* to conclusions which have been reached *a priori*, and they are neither explicable by, nor in accordance with, the theory of the productive process now generally held.

Our theory of the deductive method leads logically to our definition of the science, our definition of the science as logically to the differentiation of the productive functions, and to our theories of enterprise, labour, capital, and opportunity, and these theories to some novel practical conclusions of which the few that have been examined by us appear to be verifiable objectively. Each step would inevitably suggest the following step to any one concentrating sufficient thought upon it.

Finally it may be prudent to caution any of my readers, not very familiar with discussions concerning economic subjects, that the industrial organisation is not a machine all of whose parts move synchronously. Purposeful move-

ments must be directed by the will, which can only act intelligently after the perception, always more or less indistinct and imperfect, of the circumstances which should influence it and affect its choice. In the mechanical world the mere existence of a condition is sufficient to at once bring into being its necessary results and concomitants. In the moral world the existence of a condition has no influence at all, until it is apprehended and acted upon. As men vary so greatly in the acuteness of their perceptions, a certain vagueness and indefiniteness is sure to pervade all human combinations and reactions. Nevertheless in time any economic condition is sure to make itself felt, but it takes time. When such claims are made as that the real wages of one class of labourers can be increased only at the expense of the real wages of other labourers, it is not meant that such a result is immediate but only that it is ultimate. The immediate result of an increase in real wages, not due to an increase in productivity, is a decline in profits. But as such a decline may be distributed among enterprisers in all sorts of proportions, a considerable interval of time may elapse before the perception of the decline may be sufficiently acute to lead enterprisers to raise prices or restrict production. And it is only when they do this that the other labourers com-

mence to pay the draft drawn upon them by the special class that has obtained a rise in wages. Economic laws are "the mills of the gods"—they "grind slowly but they grind exceeding sure." Though we can never calculate just when the flour that is falling from the stones was put into the hopper in the shape of wheat, we do know to a certainty that, if the mill continues to run, the grain put into the hopper will eventually become flour, whatever the elapsed time between the two events. So the action of the economic forces, however they may be delayed and interfered with, is sure to eventuate in a normal balance. That is, in the long run and on the average, the marginal enterpriser will obtain a normal profit determinable solely by the subjective valuation he places upon the irksomeness of the responsibilities he has to assume. Likewise will the marginal labourer obtain a normal wage, the marginal accumulator a normal interest, and the marginal appropriator a normal royalty. When the exigencies of industry temporarily increase any of these rates above the normal, reactionary and self-adjusting forces are at once set in motion, which inevitably adjust the balance finally, and if delayed or obstructed in their action, swing the pendulum in the other direction, so that on the average the marginal producer, whatever his class, re-

ceives exactly his normal reward. Competition between individuals is only possible to the extent in which they exercise the same function. Consequently each class of producers settles for itself, by competition among the individuals composing it, what the normal expectation of reward to the marginal producer of its class shall be, subject of course to the limitation that the combined normal expectation of the four classes shall not exceed the totality of the product. This conformity is established by changes in the normal expectations of rent, interest, and wages, and not by any change in the normal expectation of profit. That is to say, when the total product does not afford a satisfactory residue for the entrepreneur, he does not change his normal expectation of profit, but decreases his employment of opportunity and labour until he has forced down their normal rates to the point he can afford to allow them. He does not indeed lessen his demand for capital, but adopts a course of action which obstructs accumulation and depletes capital, until his normal expectation is obtainable. On the other hand, the normal expectations of the accumulator, appropriator, and labourer are changed by every vicissitude of business. The rents, interest, and wages obtainable for the use of opportunity, capital, and labour are constantly changing and cannot on the

average exceed what the employer can afford to pay, and yet satisfy his own expectation of gain. If one of the subsidiary factors forces him to pay more, he deducts it from what he pays the others and not from his own profits. If without any increase in total product rent and royalties are permanently raised, it is at the expense of wages and interest. If the rate of pure interest is high, rent and wages suffer. If wages have advanced, it can only be because interest or royalties have declined. In each case of exaction, as the subsidiary factors have no direct relation with each other, the deduction is to be sure at first from profits, but only temporarily so, as the entrepreneur at once lessens production, until he recoups himself, and transfers the incidence of his loss to one or more of the three subsidiary factors. The rate of profit, for which any given enterprise will be undertaken and continued, depends solely upon the subjective valuation which enterprisers place upon the responsibilities involved, and all the influence rentals, interest, and wages have upon the matter is the question as to the sufficiency of what will be left after they are paid to satisfy this subjective valuation. If the expected residue is not sufficient, the enterprise will not be undertaken, or will be discontinued if mistakenly undertaken.

The verification of the theoretic results of economic research is of course made difficult by this delayed and spasmodic action of the economic forces. And on this account the public is justified in a certain suspicion of theoretic results, and hesitation in acting upon them. The suspicion and hesitation, however, if they cannot be expected to wholly vanish, should, and undoubtedly will, be greatly lessened, whenever the public is finally convinced that the fundamental bases of economic deduction have been surely and firmly established. So long as the best economists differ among themselves as to the exact scope of the science and as to the precise concept of each of the productive functions and their factors, they can have no right to expect their teaching to be accepted as authoritative. When there is no "consensus of the competent" the acquiescence of the incompetent should not be demanded or expected. The writer is not so self-sufficient as to suppose that he has uttered the final word on these great subjects, but he does hope that he has contributed something towards the settlement, which others wiser and more learned than he will develop further. This at least he is sure will be granted him, that his endeavour has been towards the resolution of problems not only confessedly unsolved, but also es-

sential to the further progress of the Science of Economics, and to its practical application to our every-day life and struggle for betterment.

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